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ABSTRACT

One of six related documents, this publication contains a U.S. Air Force course on communication skills. The course presented is one of three in a program based on the following educational goals for each student: (1) comprehend the principles of effective communication; (2) know some of the factors that enter into international relations, elements of national policy, and the employment of military force in achieving objectives over a broad range of circumstances; and (3) comprehend the concepts and techniques suitable for the effective management of material and human resources. This volume contains lessons on reading effectiveness, effective communication, listening effectively, the writing process, readable writing, and tips on speaking. Lessons present objectives and exercises, as well as content. (EL)

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Course 8A

USAF Senior Noncommissioned Officer Academy

Associate Program

Volume 1

COMMUNICATION SKILLS

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
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THIS PUBLICATION HAS BEEN REVIEWED AND APPROVED BY COMPETENT PERSONNEL OF THE PREPARING COMMAND IN ACCORDANCE WITH CURRENT DIRECTIVES ON DOCTRINE, POLICY, ESSENTIALITY, PROPRIETY, AND QUALITY.

PREFACE

WELCOME to the USAF Senior Noncommissioned Officer Academy Associate Program. Your voluntary enrollment in this course of study is evidence of your determination to improve your capabilities as a leader and manager, and of your desire to continue improving your status in the Air Force.

The AFSNCOA Associate Program parallels the resident program conducted at Gunter AFS, Alabama. The overall objective is the same, the educational goals are similar, and some of the selected readings are the same. The intent of this program is to provide educational materials rather than training materials. Ours is a professional military education (PME) program. We make no attempt to provide specific AFSC related instruction, and we do not expect that our material will be any more meaningful for one group of NCOs than for another. In developing this program, we examined the tasks common to all senior NCOs, considered the talent and knowledge most of you possess, and determined how to limit and present a body of information that will enable you to expand your knowledge and enhance your managerial ability.

This program is based on the following broad educational goals which each student should be able to attain:

1. Comprehend the principles of effective communication.

2. Know some of the factors that enter into international relations, elements of national policy, and the employment of military force in achieving objectives over a broad range of circumstances.

3. Comprehend the concepts and techniques suitable for the effective management of material and human resources.

This program is divided into three courses: Course 8A deals with communication skills, Course 8B with national security affairs, and Course 8C with leadership and management. The coverage may remind you of learning you experienced at other levels of PME, and possibly introduce you to areas you've not experienced before. All are aimed at expanding your knowledge and helping you increase your ability to successfully fulfill your position as a leader and manager. The following paragraphs briefly explain each subject you'll encounter in these three courses.

Course 8A deals with communication skills using two approaches. Volume 1 contains readings to broaden your knowledge of the communication process itself, on more effective reading practices, how to listen more effectively, and some tips on speaking. Volume 2, with its supplement, is a self-improvement unit to be completed at your own pace. Volume 2 of Course 8A is *not* covered on the final course examination; only Volume 1 is covered by the examination.

Course 8b also contains two volumes and provides an overview of the military structure that supports national policy decisions. It provides a look at the nation-state system. Further, it

addresses our policymaking process and the priorities of United States foreign policy. This course also concentrates on our foreign policy objectives toward the USSR, PRC, NATO, Latin America, Africa, and the Middle East. It further traces the evolution of strategy and the development of the principles by which military forces are employed to achieve national objectives. Finally, this course concentrates on the United States Air Force, Air Reserve Forces and National Guard, and the influences these forces have on maintaining our national security.

Both volumes in Course 8B are covered by volume review exercises (VREs). When you have submitted the second VRE, ECI will forward the final examination for Course 8B to your local test control officer. You may not enroll in Course 8C until you have successfully completed Courses 8A and 8B in order.

Course 8C contains three volumes and deals with the vast areas of leadership and management. A leader's primary asset is his people, so the course first addresses the various aspects of using the human resource. A general definition of leadership is offered, and the NCO's role as a leader is explained. The writings present traditional and contemporary studies in human behavior, including lessons on motivation and transactional analysis. The course then explores management concepts, theories, and practices with emphasis on contemporary styles. In this area, the various principles and functions of management are discussed along with management by objectives and job enrichment. Finally, we examine military management techniques. First we present the management of personnel, financial and logistical resources. Then, we will discuss problem solving and decision-making techniques as well as the fundamental concepts of computers and data processing techniques.

All volumes in Course 8C are covered by VREs. When you have submitted your third VRE, ECI will forward the final examination for Course 8C to your local test control officer. When you have completed all three volumes successfully, you will receive your diploma signifying satisfactory completion of the associate program.

Remember, the final examination for each course covers that particular course only. There is not a comprehensive examination covering all three courses as one unit. Further, each course examination is unique; that is, questions on the VREs do not show up again on the course examination. Instead, each examination consists of all new questions on the material covered. So, while the VREs can be extremely helpful to you in determining whether you understand the material covered, they should not be used as the only study aids for the course examination.

We recognize that you are professional in every sense of the word. You have dedicated yourself to a career in the finest organization in the world. By your efforts, this nation's military instrument of policy is second to no other nation's. Yours is an extraordinary responsibility, and indeed extraordinary demands are placed on you. If you are to continue at the advanced grade you now possess, you must take every opportunity to improve in whatever your military duties demand of you. Therefore, we hope you will challenge what we present in these lessons. Interact with the material. Reject what you will, but do so only after having given it professional analysis. As you are professional in your job duties, be professional in your student duties as well. Unless you eventually attend the resident course, this is your final chance at USAF PME. Use it wisely.

In these courses, the subject matter is developed by a series of learning objectives. Each of these carries a 3-digit number and is in boldface type. Each sets a learning goal for you. The text that follows the objectives give you the information you need to reach that goal. The exercises following the information give you a check on your achievement. Answers to the exercises are not provided, so if you cannot answer the exercises, review the learning objectives and the text.

If you have questions on the accuracy or currency of the subject matter of this text, or have recommendations for its improvement, send them to USAF Senior NCO Academy/ECN,

Gunter AFS AL 36114. (NOTE: Do not use the suggestion program to submit corrections for typographical or other errors.)

If you have questions on course enrollment or administration, or on any of ECI's instructional aids (Your Key to Career Development, Study Reference Guides, etc.), consult your education officer, training officer, or NCO, as appropriate. If they can't answer satisfactorily, send your questions to ECI, Gunter AFS AL 36118, preferably on ECI Form 17, Student Request for Assistance.

This volume is valued at 18 hours (6 points).

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Lesson 1

READING EFFECTIVENESS

Lesson Objective: Know the benefits of a professional reading program and some of the principles on which a reading improvement program can be based.

Introduction: In today's environment, senior noncommissioned officers must be professional in every sense of the word. We must understand much more than just the technical aspects of our particular jobs. For this reason, we need to establish a professional reading program for ourselves. The first reading in this lesson, "Professional Reading," addresses this need. At this moment you may be asking yourself where you will find the time to pursue a professional reading program when it is difficult to keep pace with the myriad of correspondence and publications you face daily. This lesson is designed to show you the importance and benefits of a professional reading program, and to give you the tools to establish such a program on your own. Reading 2, "Reading Improvement," provides the steps to improve your reading rate and comprehension. This lesson will be valuable to you both on the job and as you continue in this course.

Reading 1

PROFESSIONAL READING

IT IS only healthy self-criticism to admit that operational duties keep Air Force members so busy that they sometimes arrive at high rank and position without a thorough background of general knowledge. Many Air Force leaders have indicated that professional self-development through broad reading is a great need in the Air Force and that all members should improve their intellectual processes as they prepare for higher positions.

To build up a rich background of information for intelligent living, we need to continue our mental development throughout life. Members of the Air Force who continue to mature mentally become more valuable. Mental flexibility and continued mental growth are especially necessary today because of the constant evolution of air power and its worldwide significance.

To continue mental development, we need to draw on the accumulated knowledge and the judgment of others. We often broaden our experience by talking with others whose background and experience differ from our own. But this method alone is unreliable. It is obvious that we cannot obtain all human experience through contact with other people, just as we cannot possibly undergo all human experience ourselves. How then can we catch up and keep up?

In professional schools, human experience and judgment are collected and compressed for us. However, no matter how good these schools may be, we cannot spend our lives attending classes. But we can develop through continued professional reading.

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001. Summarize the benefits of a professional reading program.

IMMEDIATE AND LONG-TERM DIVIDENDS

Professional reading pays both immediate and long-term dividends. Two immediate dividends are an increased ability in writing and an expanded vocabulary. After formal instruction is completed, we learn to write well chiefly by unconscious imitation of what we read and hear. Through wide reading we gradually absorb accepted word usages, punctuation conventions, and knowledge of sentence structure. We tend to develop our own writing style by unconscious imitation. Of course, practice is necessary to develop writing fully.

Vocabulary is developed mainly from reading and hearing new words in the expression of ideas. From context we learn the meaning of new words and special meanings of familiar words. Of course, we need to follow up this method of vocabulary development by consulting the dictionary for definitions and preferred pronunciations.

The most important immediate dividend is being informed of what goes on in the world, in our profession, and in related professions. For this purpose, radio, television, and newspapers are not enough. Mature and intellectually inquiring persons will want to know what is being thought and done in the world that will affect them, their decisions, and the Air Force. Because we cannot foretell just what information we may need, we try to keep up with political thought around the world and with the thinking and experimentation in aviation and its many related fields.

Long-range dividends are the main reward of professional reading. Through reading we are able to draw on the accumulated experience, knowledge, and judgments of all times. Man's ability to store up knowledge and pass it on to later generations and other peoples—an ability we take for granted—was one of the most important steps in human progress. It is ranked with the invention of the wheel and the discovery of fire. With it, man was enabled to lift himself out of savagery. If we want to understand political, economic, and social history and its influence on the present, we must have the determination to dig this accumulated knowledge out of books.

The ability to profit by other people's experience is a sure sign of mental maturity. A great philosopher has said

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Reprinted from AU-1, *Communication Techniques*, Vol. I, "Individual and Group Communications," Air University, Maxwell AFB, Ala., Rev. Ed. 1978.

that if we do not know and profit from the past, we are condemned to relive it ourselves, learning by making the same errors all over again. Today's Air Force member not only should be familiar with the professional knowledge and judgment of great airmen, such as Mitchell, Arnold, and Tedder, but they also need wide general knowledge for use in problem solving. General knowledge often provides us with needed data and helps us to produce new solutions to old problems. An alert mind is required to absorb the experiences of others, and the most highly developed Air Force members have learned to do this.

A second major reason for reading is to develop our own mental powers by pitting them against strong intellects. This should be one of the main ends of professional reading, and it is an aim of the reading programs in Air University. Through comprehensive reading, we develop the ability to judge ideas and determine the reasoning behind them. We all need constant practice in locating and evaluating ideas; this is one of the main purposes of education. Solid, mature reading gives us just that kind of practice. With a broad reading background and some knowledge of logic, we are not afraid to tackle the writing produced by mature minds. This self-propulsion in logical thinking and judgment is an important aim of education at Air University. The achievement of the university will be measured by the extent to which the students carry over their desire for self-development.

A third important reason for professional reading is professional advancement. Naturally, we all hope to be among the top 1 or 2 percent, the group that comprises the leaders of the future. Almost invariably, those belonging to that top group have attended or will attend professional military education schools and college at some time in their career. Most students have already planned their program of professional reading prior to undertaking these endeavors; however, if they have not, they plan it while there.

SELECTING BOOKS AND PERIODICALS

Many of you have already read widely but feel the need for a reading program. Since you may be missing many important areas and ideas, you should consider what to read.

It is a real problem to pick the important books from the vast numbers that roll off the presses. Or course, you may be guided by the book review sections of weekly news magazines and *The New York Times*, as well as reviews in other newspapers. But for our purposes the reviews in *Air Force Magazine* and *Air University Review* are best; those in the latter publication are particularly helpful because they give full coverage to the new books of special interest to Air Force members.

You may want to know what books published in your lifetime or before are important for you to become familiar with and read. Any good bibliography will help you solve the problem. It will include the literature of war and many personal histories that are both enjoyable and important, such as Charles Lindberg's *The Spirit of St. Louis*, General Arnold's *Global Mission*, the highly readable *General Kenney Reports: A Personal History of the Pacific War*, and Alastair Buchan's *The End of the Postwar Era*.

How can you get started with a professional reading program? The best way is to follow up interests that you have already begun to develop. It is a good idea to fill out an area in which your experience or interest lies, so that you feel yourself to be a minor authority in that field.

The bibliography will list the most important books in the areas of professional interest: air power, foreign policy, the USSR, the United States, World War II, Korea, and Vietnam. It will also include valuable volumes on communication, management, and psychology.

Titles in bibliographies are usually chosen with at least two criteria in mind: (1) the importance of the book, either because of the authority or because of the information it condenses, and (2) readability, including style, reading case, and length (under 250 pages if possible). After each title, the subject matter may be annotated.

PUTTING THE PROGRAM INTO OPERATION

One of the obvious problems in putting any professional reading program into practice is finding time to do the reading. There is no simple answer to this problem. The following suggestions may help you use your time to advantage by reading more efficiently.

Use a flexible reading rate that still provides the fullest possible comprehension. When we push ourselves along at the top speed at which we can still comprehend, we take in ideas as fast as we can handle them. We don't bore ourselves and allow our attention to wander.

It is good to read with an argumentative or questioning attitude, deciding whether you will accept or reject ideas as you go along. And this is actually a very enjoyable process. In fact, reading for information alone is not recommended; it is not the way to do your best developmental reading. The reading that quickens your mind and enlarges your outlook is enjoyable as well as profitable. When you read for both enjoyment and information—which is the way to read Churchill or Tedder—you are deriving personal satisfaction from mental exercise. You are likely to find both pleasure and profit in professional reading.

It is good to keep a good book on hand for free time that occurs during the day. Most effective readers are able to read many books in this way. Pick-up reading can be managed more easily if you own the book and can mark it as you go, indexing the places you may want to refer to later, and keeping it around where you can get at it—all these habits help make the book a part of you and your thinking. Some of the great modern military classics, like Tedder's *Air Power in War* and Clausewitz's *On War*, deserve to be bought, read, marked, and kept for reference.

One of the best ways to increase your reading efficiency is to increase your reading rate. Suggestions on how to speed up reading without a loss in comprehension are found in Reading 2 of this lesson.

SUMMARY

If you have not begun your professional reading, you should start now. Professional reading pays immediate and long-term dividends. Its immediate dividends are increased writing ability and an enriched vocabulary, as well as knowledge of the current state of the world and your profession. Its long-term dividends lie chiefly in increasing your ability to use the world's knowledge, in developing your intellectual powers, and in helping you prepare yourself for advancement. Finally, you will want to read for both instruction and enjoyment.

Exercises (001):

1. **Professional reading provides both immediate and long-term dividends. List and explain both the immediate and long-term benefits of a professional reading program.**

2. **List the sources available to begin and pursue a professional reading program.**

3. **Discuss methods helpful in implementing an effective professional reading program.**

READING IMPROVEMENT

IN THE previous reading, we discussed the immediate and long-term dividends to be gained from a professional reading program. You probably asked yourself, "How can I find the time to do all the reading that I need to do?" This is a fair question, and it deserves a thoughtful answer.

In the busy routine of everyday living, the best way to find time for enrichment through reading is by increasing your reading rate. If you have never tried to improve your reading skill, you will be surprised to discover how much you can increase your speed and still understand what you read. In the reading laboratory of Air University, reports show that it is not unusual for students to show a substantial increase in reading speed after only one or two training periods. These first periods take up the reader's slack, indicating that most people can read much faster than they do.

This reading is concerned with some of the principles upon which a reading improvement program is based and offers some suggestions that you can try for yourself without laboratory equipment.

COMPREHENSION

002. Explain comprehension and its effects on reading.

Comprehension is the most important factor in reading. All of us are careful not to read any faster than we can understand, but most of us can understand much faster than we usually read. Being abstract, comprehension is relatively hard to measure. Defined as "the ability to understand what is seen or heard," it is based on the sum total of the individual's experience and education. Comprehension is of two kinds, receptive and reflective.

Receptive comprehension of written material involves literal understanding of the author's surface meaning. To accurately understand, you must have an adequate vocabulary, you must be able to get the intended significance from the author's words and sentences, and you must be able to concentrate. The words should convey the author's surface information to you.

Reflective comprehension of written material involves the ability to determine the full meaning which may be intended by the author—the ability to draw the inferences the author wishes you to draw and to apply these ideas to new situations. Of course, you must first understand the surface information before you can determine its purpose and significance. Reflective comprehension involves comparing what you already know about a subject with the author's statement and deciding which points you will accept or reject. You must be alert to draw inferences or detect depth of meaning when the author intends you to—for example, when the author gives an illustration but lets you decide how it supports his or her main idea.

Since comprehension involves the sum total of your education and experience to date, you cannot expect rapid improvement in this element. The more you see, read, and hear, the more you understand of the world and people and the more quickly and deeply you comprehend. But receptive understanding can be considerably sharpened by increased awareness of it as an important part of communication. Obviously, it depends to a great degree upon your concentration in reading and upon the manner in which you receive and store ideas in your mind.

This method of reading practice is suggested to increase your accuracy or understanding:

- Preview your material. Look it over rapidly to determine the overall organization and the central idea.
- Think. Ask yourself what you intend to get out of the material and how the general outline of the material can help you.

Reprinted from AU-1, *Communication Techniques*, Vol. I, "Individual and Group Communications," Air University Maxwell AFB, Ala., Rev. Ed. 1978.

- Read. Read intently to find information about the subjects you decided upon. The steps so far lead to both fuller understanding and better concentration.
- Reorganize and rethink. After you have read the material, put it aside and think about it. Rephrase the main idea for yourself and reconstruct the author's main line of reasoning. If you can restate it in your own words, then you understand it and can store it for future use.

Exercises (002):

1. **Explain comprehension and its impact on reading.**
2. **Define receptive comprehension.**
3. **Define reflective comprehension.**
4. **Describe the suggested method of reading practice to increase accuracy or understanding.**

SPEED

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003. Explain the ways to increase your speed while reading.

While speed is secondary to comprehension, it is still very important. Administrative and executive positions require a great deal of reading. Obviously, if you can attain a speed of 600 words per minute, you can get through far more paper work than the person who never reads anything faster than 200 words per minute.

Statistics show that in 20 hours' practice in the reading laboratory of Air University, some people are able to increase their average speed 60 to 70 percent on professional books, such as Seversky's *Air Power* and Tedder's *Air Power in War*. Others achieve more than a 100-percent improvement in speed in 36 hours of laboratory work. However, sustained improvement represents much hard work and practice. Gains in speed are easier to achieve under instruction, but substantial gains are possible without equipment or supervision. By understanding how you read and by practicing with determination, you can increase your speed.

You do not read by a continuous sweep of the eyes across the page. Your eyes move and pause several times as they cross a line, and you read only when they stop between movements. The frequency of these stops, or "fixations," is determined by your eye span, or "span of recognition." To increase your reading speed, you must do these things:

- Increase your span of recognition and reduce the time of your fixations.
- Work to eliminate the habits of regression and subvocalizing.
- Constantly strive to overcome vocabulary difficulties.

Increasing the span of recognition. Your span of recognition is the amount of material you can read at a single fixation. If you can increase this span, you will make fewer fixations per line and thus read faster. A fast reader will make only two fixations per line in *Time* magazine, reading with full comprehension; a poor reader may make five. The fast reader takes in three or four words per fixation; the slow reader may stop on every word.

With practice, you can increase your span of recognition. In the laboratory, this is done by means of exercises with a reading pacer. You can also practice on the daily paper. Newspapers are printed in narrow columns, and you may find that you are reading them at about three fixations per line. Try to bring this down to two fixations per line, and now and then try one fixation per line; that is, try reading straight down the column.

Another good exercise is trying to read the columns in *Time* or *Newsweek* magazine with two fixations per line. Daily practice of this kind increases your span of recognition.

The slow reader not only makes more fixations than the fast reader, he or she also takes more time on each fixation. By pushing yourself to read faster than is actually comfortable, you force yourself to cut down your fixation time. In the laboratory, the pacing machines can be set to do this for you. Away from a laboratory, you can time yourself with a watch. Time yourself in minutes and seconds as you read a page of narrative such as a history or a biography and then see if you can read the next few pages at a faster pace. You will soon find that you can attain excellent comprehension while reading faster than your usual rate.

Eliminating regression. The elimination of the two slow-down habits—regressing and subvocalizing—is the surest way to improve your reading skill.

When your eyes move back to the left and fix again on a word you have already read, you have made a regression. Regressing holds down reading speed. If you read too slowly, you become bored and probably will develop an aversion to reading. The good reader makes few regressions; the slow reader usually makes many. Of course, some regressions are made because of unfamiliar words or confusing sentence structure. Only an increased skill in the use of words and rhetoric can help the reader overcome this problem.

A common habit is letting the mind wander and then regressing to pick up what was missed. In the laboratory, the pacing machine prevents you from regressing. By pushing yourself and by concentrating so intently that your mind stays on the track, you can control the regression habit. Pace is closely connected with regressing. If you read too slowly to keep your mind occupied, you forget what you have read. Then you have to regress to pick up the thread. The good reader keeps

himself or herself interested. Since he or she does not have time for woolgathering, he or she does not make unnecessary regressions.

Eliminating subvocalizing. Another serious reading fault that is common in adults is subvocalizing. This habit develops as we learn to read. Most of us were first taught to read aloud. When we began to read silently, we vocalized silently. Some of you may have taken college courses that required much supplementary reading, and you learned to read rapidly. Others of you may have taken technical courses that required you to analyze and evaluate each sentence. As a result, you may have remained a slow reader. Many people pronounce each word silently and therefore can read no faster silently than they can aloud. Few adult readers actually form syllables with the lips, but many either form the syllables in their throats or pronounce the sounds mentally. Thus their speed in silent reading is limited to the rate at which they can form or "listen" to spoken words. Since few people can read aloud faster than 250 to 300 words per minute, the subvocalizer is tied down to that speed.

A series of tests at Air University has shown that most officers read at an average of 220 to 240 words per minute. This is a slow rate for light reading material. Increased reading rates would give these officers the ability to handle quickly much of the paper work that is a part of their day's work.

Let's see how subvocalizing can be overcome. In vocalizing, you are taking three steps for the reading process using eye, throat, and brain. Actually, the good reader takes only two steps, eye and brain. Put your finger on your throat muscles as you read. If you feel any vibration, you are using those muscles to say the words to yourself. If you continue to vocalize after trying to avoid it, chew gum or hum to yourself as you read, but constantly push yourself. When you get up to or above 400 words per minute, you will find that you vocalize less often. Continued practice at high speeds will eventually free you of this restraining habit.

Overcoming vocabulary difficulties. Finally, work at building your vocabulary. The reader with a poor vocabulary must constantly regress, to guess at meanings, and unfamiliar words cause him or her to take long fixations.

There are several ways to improve one's vocabulary. Probably the best way is to read widely. New words often become clear in context, and this is also true of new meanings for old words. Another way to build a vocabulary is to look up new words in a dictionary, list unfamiliar words as you read, and then use them often enough to be sure of them. New words and new meanings for old words help you read steadily and swiftly only if they have become an active part of your reading vocabulary. It is usually futile to memorize lists of new words from books that promise you a large vocabulary. Words are functions of thoughts, and as you learn to handle complicated thoughts in reading, you also strengthen and develop your useful vocabulary.

Exercises (003):

1. **Explain why speed in reading is beneficial.**
2. **Explain the span of recognition and how to improve it.**
3. **Discuss regression and how to overcome it.**
4. **What is "subvocalizing" and how can you overcome it?**
5. **How can you decrease vocabulary difficulties?**

ADAPTABILITY

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004. Explain adaptability in reading.

Adaptability, the real key to effective reading, is the ability to adjust your speed to the level of your reading material. Neither speed nor comprehension should be your goal; rather it should be a flexibility in gearing your speed to the importance and the difficulty of the material. Some people read the comics and their school assignments at the same plodding rate. The habit of reading everything at the same speed is one sign of the immature reader. Check constantly to be sure that you are adapting your speed and comprehension to the material and to your purpose in reading.

Adaptability and discrimination go hand in hand. Discrimination is knowing what is worth reading and how to read it for best results. Of course, in Air Force schools you are given some guidance in what you are to read. But when the decision rests with you, choose carefully so that you do not waste your time. Decide what you want to take away from your reading *before* you read. Then read in the most efficient manner to fill this need. Do not read fast just to get through material, and do not read so slowly that you waste valuable time that could be put to other uses. If you are studying school materials or regulations that you must understand thoroughly, slow down and read with critical attention to detail. Or if you enjoy a certain style or description, slow down and think about it—savor it. But if you are reading for general information and feel that you have a good control of the content as you proceed, then speed up and save time for more important activities.

Skimming is a useful technique for comprehending quickly the sense of a passage. It is useful in taking an overview of an article before reading thoroughly and in looking for particular material. Proficient skimming takes considerable practice. The following suggestions will help you develop a good technique. First, look at the table of contents if there is one. Then riffle through the book, giving most of your attention to chapter headings and section heads. When you skim, look for topic

sentences and summary sentences. Connectives such as *if, so, therefore,* and *finally* may point up these important sentences. Of course, you will watch for words that are underlined or italicized, and you will want to pay special attention to the initial and closing paragraphs. When you feel that you have an overview of the author's main ideas and outline, ask yourself a few study questions and plunge into rapid, fruitful reading.

SUMMARY

Most people have the capability to read much faster than they actually do. You can use your reading time to much better advantage if you follow helpful suggestions to increase your reading speed and retain comprehension. The main causes of slow reading are short span of recognition, regression, subvocalizing, and poor vocabulary. By overcoming these handicaps, you can make surprising gains in speed that will enable you to handle paper work much more efficiently. The key is adaptability. Adapt your speed to what you are reading. Be the master of your reading habits, not the slave!

Exercises (004):

1. **Why is flexibility important in reading?**
2. **What is discrimination in reading, and how can it help you?**
3. **How can skimming help you in reading?**
4. **Explain how to skim effectively.**

Lesson 2

EFFECTIVE COMMUNICATIONS

Lesson Objective: Comprehend the fundamental elements and concepts involved in the communication process.

Introduction: When individuals are asked what the major problem in their organization is, the response most often given is a lack of communication. We all communicate on a daily basis, but often we don't reach the understanding desired, and many times we're not sure why. This lesson addresses the various parts of communication, pointing out some of the common problems and offering suggested ways of overcoming them. Reading 1, "The Communication Process," explains what happens in any situation where communicating is attempted. Reading 2, "Communication in the Air Force," explains how we communicate within our organizations. Reading 3, "How Language Communicates," discusses the proper use of words to obtain the desired results. Reading 4, "Logical Thinking," presents the use of reasoning to increase the effectiveness of our communication. The concepts in readings 3 and 4 span the entire spectrum of communications whether writing or speaking. Reading 5, "Nonverbal Communication," discusses one aspect of the oral communication process that is often overlooked but is important in the oral communication process.

THE COMMUNICATION PROCESS

SINCE SUCCESS in most aspects of living today is directly related to the way we communicate, an understanding of the communication process is of valid concern. Communicating effectively, in common with most human endeavors, is complex, variable, and at times uncertain. Nevertheless, if we analyze the cardinal elements of communication and the significant relationships between these elements, we will have a better understanding of the communication process.

APPROACHES TO COMMUNICATION

005. Summarize each approach to communication.

Each of us has an approach or model or way of looking at communication. The approach we adopt greatly affects our effectiveness in any communication *transaction*. The notion of transaction was originated by John Dewey and Arthur Bentley as a means of describing one systematic approach to any field of study, different from self-actional and interactional approaches. To describe adequately the transactional approach, we need some understanding of the other two approaches.

Self-action. The self-actional approach treats communication as a means of manipulating others—what one person does to another person or persons. The communicator who takes this approach sees communication as the *act* of transferring thoughts or ideas into the minds of others. As seen in figure 2-1, the focus is clearly on *message* transmission. The advocate of this approach attempts to play the role of doctor and *prescribe* how people should communicate. The trouble with prescription is that what may work with one audience may not work with others. Obviously, our audience will always affect the nature of communications.

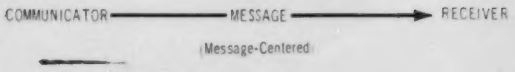

Figure 2-1. Self-action.

Interaction. Recognition of the role receivers play in communication leads many persons to adopt an interactional approach. This approach represents an improvement over the self-actional one. Interactional implies a kind of reciprocal influence—speaker tells a joke, audience laughs; teacher makes a perplexing statement, student looks puzzled; communicator provides a stimulus, receiver responds. The communicator who views communication as interaction operates on the premise that receiver response is an integral factor in communication. As seen in figure 2-2, messages are sent not only by the communicator, but by the receiver as well, in the form of feedback.

There are two major problems with this approach: First, it tends to break communication into its major elements (communicator, receiver, message feedback) to be considered separately. If communication is a process, then the elements must be *interdependent*. To consider one element at a time while ignoring how it affects and is affected by others negates the whole idea.

The other problem in interactionalism is that of cause and effect. The stimulus-response theory implies that the stimulus causes the response it produces. But such an assumption implies total predictability of a response to a message. We can never be certain that the message causes a particular response since other factors may have intervened.

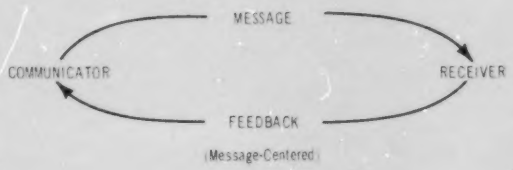

Figure 2-2. Interaction.

Reprinted from AU-1, *Communication Techniques*, Vol I, "Individual and Group Communications," Air University, Maxwell AFB AL, Rev. Ed. 1978.

Figure 2-3. Transaction.

Figure 2-4. Three approaches.

Transaction. The more sophisticated transactional approach focuses on the concept of *meaning sharing* rather than *message sending* by accounting for the influence of other factors upon the process. As figure 2-3 shows, messages are sent from communicator to receiver and receiver to communicator. Likewise, feedback is not simply a one-way phenomenon. Time of day, the mental readiness of communicator and receiver, experience, attitudes—along with thousands and perhaps millions of other factors—all interface with the major elements and with each other to influence the kind of meaning created during the transaction.

Simply put, *the goal of any communication transaction is the sharing of meaning.* Instead of conceptualizing "First I speak, then you speak," the transactional approach sees all participants as perpetual communicators, constantly transmitting, organizing, and interpreting verbal and nonverbal messages. Communication thus becomes much more than a simple process of message sending and receiving: it becomes something we do *with* others rather than *to* others.

What are some implications of the transactional approach?

(1) Whereas self-actional and interactional approaches suggest message transmission, transactional communication implies meaning creating. We cannot "get" or "have" another's ideas any more than we can "have" someone else's pain or happiness. Ideas and happiness can be evoked or shared but not transmitted. Others understand what is said by creating meaning for message symbols from their own experience.

(2) No one element in the transaction can be described or analyzed accurately apart from other relevant elements and factors. For example, John Smith may be effective teaching a certain group of students, a given content matter, in a prescribed place, at a specific point in time, and so on. Smith may be ineffective if students, content, place, or time change. Therefore, whether or not Smith is an effective teacher depends upon the total transaction.

(3) A person cannot *not* communicate. Since a transaction involves many factors, some factors communicate whether a person intends to communicate or not. A teacher who does not show up for class, a student who cannot answer a question, a classroom that is too warm—all communicate something. Even if we attempt *not* to communicate, communication will, in fact, occur.

(4) Transactional communication is concerned with process as well as product—with how we communicate as well as what we communicate. A person taking a transactional perspective will give special attention to external factors affecting communication. In a classroom, for example, a teacher's willingness to invite critical comments, meet students' psychosocial needs, or establish a climate of trust will aid communication, and thus enhance learning.

Conclusion. A simple distinction between the three approaches is shown in figure 2-4. Self-action implies one-way communication; messages are sent from communicator to receiver. Interaction suggests two-way communication: messages are sent and feedback received. A transactional perspective goes beyond interaction to require a sharing of meaning; emphasis is on the meaning shared, not the message sent. As classroom teachers, public speakers, or just everyday communicators, an approach to communication as transaction will start us on the way to more effective use of our communication skills.

Exercises (005):

1. **What is the basic function of the self-actional approach to communication?**
2. **What appears to be the purpose of the interactional approach?**
3. **How does the transactional approach benefit both communicator and receiver?**
4. **Give examples of each approach to communication.**

BASIC ELEMENTS

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006. Explain how changes in the basic elements can affect communication.

A change in any element or factor of a transaction will in some way affect the communication. Obviously, change in one of the major elements—communicator,

message symbol, feedback, or receiver—will generally cause the greatest change.

Communicator-receiver. As communicators, our effectiveness is related to two basic factors. First, we consciously or unconsciously reveal attitudes toward ourselves as communicators, toward the subject matter, and toward the receivers. These attitudes must be positive if we are to communicate effectively. We must indicate that the message is important and make it clear that the receivers have a need to know the ideas. Second, although we should speak or write from a broad background of accurate, up-to-date, stimulating material, we must exercise great care to make sure we use message symbols that are meaningful to our audience. Far too often, communicators use a highly technical or professional background, with its associated vocabulary, which is meaningful only to others with a like background. Reliance on technical language often impedes effective communication.

Message symbols. At its basic level, communication is achieved through the use of simple verbal and nonverbal symbols. The sounds of our language, formed into word symbols, are the basis for our verbal system. Symbols like gestures and facial expressions, form a nonverbal system. But words and gestures are seldom projected in isolation. Effective communication occurs only when symbols are combined in meaningful wholes, in ideas, sentences, paragraphs, speeches, or chapters. Each part of the whole then becomes important for effective communication.

Good communicators use both verbal and nonverbal symbols effectively. The problem is that our verbal and nonverbal messages do not always say the same thing. In fact, our nonverbal systems may communicate just the opposite from our verbal ones, thereby confusing the communication transaction. In addition to having the presentation well prepared and organized, a good communicator also gives attention to such nonverbal factors as eye contact, movement, gestures, and sincerity.

Feedback. Feedback in communication implies audience adaptation. A speaker's message "bounces off" the listener and information is fed back to allow the speaker to adjust to the message. A smile, a frown, a yawn, or laughter, all suggest adjustments which the speaker can make to increase effective sharing of meaning. *External* feedback of this type operates when speakers are sensitive to the reactions of others. On the other hand, the speaker may engage in *internal* feedback by asking the question: "What did I actually communicate to my audience?" Of course, a speaker's internal feedback and external feedback are interwoven. Our self-perception, based on internal feedback, will doubtless affect response to external feedback, and external feedback will influence our perception of internal feedback.

Receiver. Communicators should always remember a basic rule of thumb: Communication succeeds only in relation to the reaction of the receiver. When the receiver reacts with understanding and adapts accordingly, then, and only then, has effective communication taken place. The receiver's attitude may be one of resistance, of willingness, or of passive neutrality. Whatever the attitude, we must first gain the receiver's attention and then retain it. Probably the more we vary the approach, the more successful it will be.

Exercises (006):

1. **Summarize the two basic factors influencing our effectiveness as communicators.**
2. **How does the use of message symbols affect communication efforts?**
3. **How does feedback affect communication?**
4. **What is required of the receiver for communication to occur?**

OBSTACLES TO EFFECTIVE COMMUNICATION

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007. Paraphrase the obstacles to effective communication.

Both verbal and nonverbal communication contribute to misunderstanding. Three obstacles to effective communication are lack of a common core of experience, confusion between the symbol and the thing symbolized, and the misuse of abstraction.

Lack of common core of experience. Perhaps the greatest single barrier to effective communication is lack of a common core of experience between communicator and receiver. Communication can be effective only to the extent that the experiences—physical, mental, or emotional—of the persons concerned are similar.

Symbols do not transport meanings from communicator to receiver in the same way that a truck carries bricks from one location to another, because symbols do not necessarily evoke the same meaning for different persons. Psychological tests which picture middle-class household items, for instance, produce false results for disadvantaged children. Past experiences provide meaning, not the symbols themselves. Since a common core of experience is basic to effective communication, a communicator's words or nonverbal cues cannot communicate meaning to receivers unless receivers have had some experience with the objects or concepts to which these symbols refer.

Confusion between the symbol and the thing symbolized. Words and nonverbal cues are simply

representations. They represent, or correspond to, things that exist, that are experienced, or that people talk about. At best, words serve as a map. Just as a useful map accurately represents some specified territory, language should correspond to the objects or concepts that it represents. Like a map that contains errors, a statement that contains inaccuracies implies a relationship that does not exist. Nothing in the nature of language prevents words from being used in any way the speaker wishes.

Although it is obvious that words and reality can be different, people sometimes fail to make the distinction. A person may, for example, lose his job merely because someone calls him a thief. If people act as though *being called* a thief and *being* a thief are the same, they are confusing a word with a thing it represents. On the assumption that many people will "buy a label," or accept a word for a thing, manufacturers invest much money in naming their products. Effective communicators carefully differentiate between symbols and the things they represent, keeping both in true perspective.

Misuse of abstractions. Concrete words refer to objects that human beings can experience directly. Abstract words, on the other hand, stand for ideas that cannot be directly experienced—things that do not call forth mental images in the minds of the receivers. Suppose that a certain Gemini capsule is named "The Unsinkable Molly Brown." The Molly Brown is concrete. It can be touched, seen, and heard. Since Molly Brown is concrete, its name represents a concrete reality. If, however, a communicator who has seen the Molly Brown says, "I saw a Gemini capsule," the listeners do not form a mental image of the Molly Brown because there are capsules of many different names. The communicator who says only "I saw a capsule" is speaking on an even higher level of abstraction. The phrase "I saw a space vehicle" is so abstract that the listeners are likely to form mental images that do not resemble the Molly Brown in any way.

Abstract words are necessary and useful. Their purpose is not to bring forth specific items of experience in the minds of receptors, but to serve as shorthand symbols that sum up vast areas of experience. The abstraction "Air Force management," for example, cannot be directly experienced, but the term causes receptors to think of certain individual Air Force activities from which to infer a relationship. For the sake of convenience, the catchall label "Air Force management" is applied to all these related experiences. If communicators were forced to use only concrete words, they would soon bog down in details.

Although abstractions are convenient and useful, they can lead to misunderstanding. The danger is that abstractions will not evoke in a listener's mind the specific items of experience that the communicator intends. The receiver has no way of knowing what experiences the speaker or writer intends an abstraction to include. It is common practice in the Air Force to use such abstract terms as "proper measures" and "corrective action." These terms alone fail to convey the communicator's intent. When abstractions are used in communication, they should be linked with specific experiences through examples and illustrations. Even better, the level of abstraction should be reduced by using concrete and specific words as much as possible. By using concrete words, the communicator narrows and gains better control of the image produced in the minds of listeners and readers.

SUMMARY

Our understanding of the communication process helps us communicate more effectively. The transactional approach suggests an interdependence of elements and factors in a meaning-creating activity where it is impossible not to communicate. Although communicator, message symbols, feedback, and receiver are the primary elements in communication, other factors may also be important. Some of these factors may pose obstacles to effective communication. Three common obstacles are a lack of common core of experience, confusion between the symbol, and the thing symbolized, and overuse of abstractions.

Exercises (007):

1. **Of the three [illegible]ary barriers to effective communication, which is most [illegible]ause misunderstanding and why?**

2. **Explain the meaning of the term "confusion between the symbol and the thing symbolized."**

3. **Explain why abstract words are necessary and useful.**

Reading 2

COMMUNICATION IN THE AIR FORCE

IF the Air Force is to carry out its mission, everyone in the "chain of command," regardless of status, has a responsibility to communicate effectively. One of the prime responsibilities of managers is to develop and maintain an efficient communication system. They plan for accomplishing the organization's mission, making decisions, solving problems, informing, questioning, and directing actions that influence the behavior and attitudes of all members of the organization. However, no matter how sound the planning or how acccurate the decisions, the efforts of managers become effective only through communication. Their ability to enlist consistent and willing human effort for the tasks to be performed depends on their ability to commmunicate effectively. Subordinates have an equal responsibility to convey their ideas and attitudes so that managers will have the information necessary to make decisions and judge their effectiveness.

What, then, is communication in the Air Force? Simply stated, it is comprehending the meaning of the message, verbal and nonverbal, between superiors and subordinates or between co-workers to enhance accomplishment of the mission. Since communication is the vehicle by which an organization progresses, the responsibilities of managers, their staffs, and their subordinates are:

- to keep communication channels open,
- to maintain an environment conducive to communication, and
- to communicate effectively.

COMMUNICATION CHANNELS

008. Explain the communication channels and means of communication within organizations.

Any assumption that formal organizational charts present all or even most of the channels ordinarily used in communicating is an oversimplification of the facts. Communication in a military organization moves in many directions—down, up, laterally, from internal sources to external, and from external to internal.

> Organizational communication systems have two aspects: the formal system and the informal system. The formal system normally follows the lines of authority as outlined by the organizational chart. Organizational policies and orders are generally transmitted through this system. The informal system consists of social relationships which have the power to determine whether the authority transmitted through the formal system will be accepted.[1]

No attempt is made here to explain methods used to establish communication channels. Our purpose is to emphasize the fact that the establishment of such channels is a prerequisite to the efficient flow of information. They furnish the path, but they do not accomplish the communication.

What, where, and why communicate? The flow of communication from top levels of management to subordinates has features that distinguish it from the flow of communication from subordinates to management levels. And the flow on the same level, to the public, to higher management levels, or to staffs differs from both of these patterns.

Communication *downward* is the exercise of authority, i.e., giving orders, establishing policies, issuing directives, praising, censuring, questioning, and informing.

Communication *upward* must furnish attitudes, opinions, ideas, recommendations, and reports of conditions, progress, and results. In many organizations, the most serious and extensive problem is the manager's isolation from communication channels. Certainly, such

[1] James S. McCormack, "Communication and the Organization," *Readings in Interpersonal and Organizational Communication*, edited by Richard C. Huseman, *et. al.* (Boston: Holbrook Press, Inc., 1969), p. 54.

Reprinted from AU-1, *Communication Techniques*, Vol. I, "Individual and Group Communications," Air University, Maxwell AFB, Ala., Rev. Ed. 1978.

isolation is often desirable as well as unavoidable; managers cannot be concerned with every item. However, they must have sufficient data on which to base their decisions. Managers and their subordinates must recognize that "feedback" is just as important as downward communication.

Communication *laterally* is less complicated by position or authority than communications either downward or upward. But lateral communication is the backbone of successful cooperation. It is used extensively in interservice functions and in any headquarters to secure information and coordination among staff members.

Ways and means of communicating. What are the most commonly used methods of communicating? What channels of communication do "top level" supervisory and civilian personnel use in their military contacts? A study of such channels within the Air Defense Command by Goetzinger and Valentine[2] provides possible answers to these questions. In this group, 37 percent of the communications were channeled upward and 37 percent downward. Lateral communication contacts accounted for 26 percent of the military traffic.

Military groups emphasize face-to-face, individual conferences rather than group or staff conferences. Therefore, any training designed to equip members for "top level" jobs must, of necessity, include preparation of these individuals to deal with brief, face-to-face, individual, and small-group communications rather than the traditional, formalized, public speaking skills.

Oral communication. All levels of management participate in person-to-person, oral communication. In fact, the average military person spends approximately 75 percent of the communicative day either as a speaker or as a listener. This one-to-one approach allows a person alternately to talk and to listen. It provides the advantage of rapid, personal, and profitable communication in direct proportion to a person's ability to transmit, understand, and listen. The person-to-person approach is often regarded as the most satisfactory communication method because it provides an immediate opportunity to determine whether understanding has been reached.

However, not all oral communication flows directly from one person to another. Face-to-face communication may involve group discussion in which individuals contribute facts, opinions, or knowledge about particular problems. All sorts of meetings take place. They may be mass informational meetings (such as commanders' calls), conferences, classroom lectures, briefings, committee meetings, or interviews.

These are only a few of the many situations that call for oral communication. Obviously, organization, unit solidarity, and esprit de corps determine the manner in which the military mission is accomplished. These elements depend largely on the oral skills of managers and their staffs.

Written communication. At times, face-to-face communication is neither practical nor possible; therefore, written communication is necessary. Written communications serve the same functions as oral communication, and they also provide a record of information, direction, and expressions of feelings of immediate and later use. Indeed, the written word is the basic means for conveying place-to-place communications to a larger scattered audience.

Exercises (008):

1. **Compare downward, upward, and lateral communication in an organization.**
2. **Defend the person-to-person approach as being the most effective means of communication.**
3. **Discuss the differences between oral and written communications.**

BARRIERS TO COMMUNICATION

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009. Explain the barriers to effective communication that exist in organizations.

The first step in learning to communicate effectively is to become aware of communication barriers. Studies show that communication barriers fall into four major categories: organizational, linguistic, psychological, and managerial. They vary from one organization to another.

Organizational barriers. Organizational charts provide for the formal channels of communication within a military organization. Personnel are assigned to functional positions, and, generally, the rank status of each individual depends upon the functional importance of the assignment within the organization. Organizational barriers arise when the responsibilities and lines of authority are not thoroughly understood.

Certainly no one wishes to eliminate status within an organization, for status strengthens direction or control. Like any other society in the modern world, military society cannot be status-free and classless. Status systems are functional necessities in military organizations just as they are necessary in other formal organizations. But overemphasis on status often blocks effective communication.

Have you ever observed chickens in a barnyard? They have a truly dictatorial organization, a pecking order.

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[2] Charles Goetzinger and Milton Valentine, "Communication Patterns, Interactions and Attitudes of Top-Level Personnel," in the Air Defense Command, *Journal of Communication*, XIII, No. 1, March 1963, 54-57.

The best fighter assumes command of all the other chickens, pecking at them and taking first choice of all the food. The second chicken in the pecking order pecks at all the other chickens except the number one chicken. And so on down the line to the last bedraggled chicken who has nothing to peck and no choice of food. Of course, the pecking order overemphasizes status.

Status should not exist for its own sake. The only reason for status in any organization is that it helps to get the job done. The different grades and ranks in a military organization should coincide with the different levels of responsibility and authority required to accomplish the unit mission. All individuals should understand their particular status in the organization. They should be able to identify themselves and their roles in accomplishing the unit mission. All members of the unit must establish their personal status. If there are members who cannot do this within the framework of the organization, they may try to establish themselves in some unofficial or informal way that may disrupt the normal organization and the smooth flow of information. Frustrated attempts to establish individual status sometimes cause psychological barriers to effective communication.

The many levels through which the communication of organizations must pass often cause delays in communication and provide chances for distortion of the original message. There are times when failure to recognize and encourage the flow of communication—upward, downward, and laterally—causes communication to break down.

Most organizations have well-defined channels for moving messages downward in the status hierarchy. However, lateral communications help in the integration and coordination of work and upward communication or "feedback" is often the only measure of effective communication.

Language barriers. Words, at best, are clumsy tools of communication—they are artifacts, human works of art—and the use of language is one of the most difficult of all enterprises. To illustrate the awkwardness of words in communicating on a job, visualize yourself landing an airplane. A very efficient communication system functions within your nervous system. Your hands and feet work in perfect coordination as you control the rudder, elevator, and ailerons. Now visualize three people teamed together to fly an airplane with only words as communicating devices. The controls have been rigged so that one person controls the rudder, one the elevator, and one the aileron. You can easily imagine the results of this arrangement. Words would not be adequate to produce the rapid, accurate coordination necessary to land the airplane.

Language problems are present in both oral and written communications. Certainly, it is important to choose the right words in terms of audience experience, standard usage, and understandability. However, it is easy to recognize a new word and look it up, but it is often difficult to recognize different meanings of words already familiar to us.

Social changes should not be overlooked in our choice of language. Speaking or writing "down" to an audience may be a communication barrier just as the overuse of "intellectual gobbledegook." Consider the ever-increasing educational level of the military society. The military communicator's audience is relatively well educated and intelligent. In 1947, only 27 percent of all Air Force officers held college degrees. In 1967, approximately 70 percent were college graduates. By 1978, 92 percent of the officers corps held undergraduate degrees. Approximately one out of every five officers has a graduate degree. Virtually all of the enlisted force have graduated from high school. Many have college degrees, and some have advanced degrees.

Psychological barriers. Each member of an organization has at least four basic psychological needs: a feeling of security, an opportunity for advancement, the desire to be treated fairly, and the realization that the work is both useful and important. What happens when these needs are not satisfied?

Withholding information. Everyone withholds information. The manager, the staff, and other subordinates withhold information for different reasons. Subordinates are inclined to stand in awe of the manager, partly because managers represent authority and partly because they write effectiveness reports and recommend persons for promotion. Subordinates are students of managers and observe their every move. Subordinates avoid telling managers about things that are upsetting, especially if the manager gets excited easily. The managers, in turn, usually study their superiors. The manager may not spend much time in explaining things to subordinates: they are there to do a job; let them get on with it. The typical manager says, "I have an open door. If anyone wants any information, he can come and see me." Unfortunately, the average subordinate needs more encouragement than this.

The blame for withholding information often falls on managers. In withholding information, they create a vacuum. By natural gravitation, rumors fill the vacuum. And rumors can be injurious to any organization.

What is the source of rumors? To answer this question, we must consider two communication networks that exist in all organizations. First, there is the formal network that follows the organizational chart. If managers think of this communication network as the only one of any consequence in their organization, they make a false assumption. In any organization, there is a second, unofficial network—the grapevine. No manager can destroy the grapevine. It springs up as soon as an information vacuum develops. Therefore, to minimize the difficulties arising from rumors, managers should provide subordinates with as much information as possible. This communication is especially important in matters of personal concern to the individual.

Cliques. The gregarious instinct prompts us to band together in groups. Up to a certain point, there is nothing wrong with this tendency; in fact, group interest is

healthful in any organization and is good for morale. People in any office may enjoy getting together for an outing or may give a farewell party for a member who is being transferred. But when the tie binding members of a clique becomes more important to them than the unit mission, the organization suffers.

Cliques thrive in an information vacuum. They include people who have difficulty in identifying their status with the official organization. Cliques often form in an atmosphere of isolation. Organizations may be isolated because they are physically separated from headquarters. When part of an organization is located at another base, there is a good chance that this segment will lose sight of the overall organization; sometimes a clique with its own objective will develop. Isolation may also be caused by the nature of the work. Unless the importance of the overall organization is kept before specialists, they are likely to form a strong clique.

Managerial barriers. Operational systems are built and run by people. Some of the individuals concerned are inside the organizational unit and are reached by directive activities. Others outside the unit are reached through coordinating activities. In both cases, managerial ideas must be transmitted and accepted. No system can run smoothly unless people understand and agree on what is to be done and how they are to do it. This is the job of communication.

Communication problems are usually considered major problems of management because mutual understanding is essential. People involved in management have different backgrounds, objectives, desires, and motivations. They must have a common goal, however, and they must be willing to listen and to evaluate opposing points of view. The manner in which both good and bad communications are received often determines the effectiveness of teamwork. Fears, prejudices, and jealousies among individuals tend to disappear when Air Force managers listen and take a progressive and understanding attitude toward all information and suggestions that reach them. If they merely criticize or discipline when things go wrong or if they are insincere or inaccessible, fail to keep promises, or do not take appropriate actions, they will erect barriers to communication.

Exercises (009):

1. Explain organizational barriers.
2. Discuss language barriers.
3. Discuss psychological barriers and how they affect the needs of individuals and organizations.
4. Explain managerial barriers.

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010. Explain how to overcome the common barriers to communication in organizations.

Once you have a clear understanding of the barriers to communication, you can recognize and overcome them or change the conditions that cause them. This is a continual job that must concern every level of an organization. Although the major responsibility for effective communication is the manager's, each individual in the organization must recognize the value and importance of communication.

The first step in developing effective communication in command is the establishment of a communication policy within the organization. This policy should define lines of responsibility and authority, establish communication channels, provide a climate for effective communication, and keep people informed.

The next step is to increase skills in written and oral expression. The fundamental principle in either kind of communication is to develop sound ideas before any attempts are made to communicate them. Thinking provides the ideas, concepts, opinions, and facts to be communicated to a receiver. The logical thinking process is outlined in Reading 4 of this lesson. Suggestions for developing writing skills are given in Lesson 3 and 4.

Ideas for communication must promote efficiency in mission accomplishment. When a manager relays an idea to a subordinate, it should stimulate action that will further the mission. At one period in the Golden Age of Greece, it was customary for two men to speak to the people about important current problems. One of these men was Aeschines, a man of genius and a polished orator. The other was Demosthenes, who overcame a speech impediment to become the most persuasive speaker of his day. When Aeschines spoke to the masses, they knew that they had heard an impressive and brilliant speech, but they were not compelled to act. When Demosthenes spoke to them, they were moved to avenge Athens against Philip of Macedonia. Demosthenes was an ideal communicator; the people understood his ideas and responded according to his wishes.

As effective communicators we are concerned, not only with the ideas that we communicate, but equally with the ideas communicated to us. Communication is often a give-and-take matter, as in an interview or a group conference. Much research has been done on the subject of group discussion in industry, education, and the military; and the conference has long been recognized as an efficient method of investigating problems, answering questions, or achieving understanding.

Group discussions and conferences require effective listening. Face-to-face communications in these activities cannot exist without a leader-listener who encourages others to express themselves freely. To be good

communicators we must learn to be good listeners. We must be physically and mentally prepared to listen. We must listen for the *ideas* that the speaker is trying to communicate, and we must organize these ideas mentally so we can remember them. Good listening is more than just hearing. If we listen well, we will accumulate data that can help us reach decisions; equally important, we can determine whether we have been understood. Good listening results in effective leadership, harmony, and mutual understanding.

Since communicating is more than just an oral process, as communicators we must be able to *read* efficiently. We must make our way through a maze of paperwork but also build up a rich background of knowledge necessary for making the right decision and for keeping ourselves well-informed. Lesson 1 gave suggestions for planning a program of well-rounded professional reading and for increasing reading rate. Improvement in communication skills begins when we become dissatisfied with our present ability and desire to be more effective. The references present the fundamentals we need to know about the problems of communication, the techniques that can be usefully employed, and the basic difficulties involved. No attempt has been made to solve particular problems found in each organization, but we should now recognize and analyze them. A knowledge of communication techniques will give us a sense of direction. We must study our own specific situation, so that we can set and achieve the goal of effective communication, up, down, and across the chain of command.

SUMMARY

Communication in the Air Force is the meeting of meaning between co-workers by any means and in any direction that will produce a desired result most efficiently. The flow of information may be downward, upward, or lateral, and it may take the form of either oral or written communication. Oral communication includes telephonic or face-to-face conversation between two people or in discussion groups and meetings. Written communication serves the same purpose but provides a permanent record for later reference.

The five main barriers to effective communication in the Air Force are organizational, status, language, psychological and managerial. These barriers can be overcome by establishing clear-cut lines of authority within the organization, insuring that communication flows upward and laterally as well as downward, improving written and oral skills, substituting accurate information for rumors, and being receptive to the ideas and feelings of others.

Exercises (010):

1. **Discuss the importance of establishing a communication policy in the organization.**
2. **Why are efforts to increase skills in written and oral expression important to the organization?**
3. **Explain the "give-and-take" concept of communication.**
4. **What must we do to be good communicators?**

HOW LANGUAGE COMMUNICATES

THOUSANDS of oral and written communications are issued daily in the Air Force, and the same is true in government and industry. Words fill our lives. Certainly no one will complain about the *quantity* of the verbal outpouring. But with words flung about as heedlessly as they now are, we might well raise some questions about their *quality*, their *accuracy*, and their *relevancy*. It is in this area that the student of general semantics is interested.

General semantics is a relatively new subject, and there are few books on this topic. The word *semantics* comes from the Greek word for "meaning." But general semanticists are concerned with the capacities and limitations of language as a means of communication as well as with simple word meanings. They are interested in the behavior of people in reacting to word symbols. Their goal is to make our language a more precise and accurate tool, and thus reduce the misunderstandings that arise from the nature of our language.

LANGUAGE-FACT RELATIONSHIPS

011. Summarize the difficulties in using language to communicate.

Many of the principles of general semantics have been known for ages, but they were not formulated into a concise system until Alfred Korzybski's book *Science and Sanity* was published in 1933.[1] This book dealt directly with language problems which had not previously received attention by other writers.

The question that Korzybski first posed was simply this: Why do civilizations break down when bridges, skyscrapers, and other structures do not? Both are man-made. If we can create methods for solving the material problems of bridge building, why can't we invent equally effective methods for handling human problems? If physical structures (bridges, buildings, or airplanes, for example) and social institutions are both products of the human nervous system, what do engineers do when they build a bridge that the social scientist often fails to do? The difference, Korzybski found, was in their talking. Engineers use a language—words and figures—that is similar or appropriate in structure to the facts with which they have to deal. They look at the facts and then fit their comments to those facts. On the other hand, in social living, we often speak in language that does not reflect the true situation. Too often the words do not fit the facts.

Here Korzybski points to a principle basic to an understanding of language use. The principle is this: The word is not the thing; the symbol is not the thing symbolized; the map is not the territory. What are words? Words are simply *forms of representation*. They are intended to represent or correspond to anything that may exist, that may be experienced, or that anyone might want to talk about. At best our language must be considered only as a map. To be useful, a map must accurately represent the territory. The arrangement of symbols, dots, and lines on the map must correspond to the pattern of the actual cities, roads, and rivers of the territory. For example, when we actually survey the territory from west to east, we find San Francisco, Chicago, and New York. We would expect to find these cities in the same order on a map of the United States. If, however, they are represented in the order of San Francisco, New York, and Chicago, we would say that the map is not properly coordinated with the territory. Any traveler attempting to follow such a map would lose his way.

What has been said about map and territory can also be said about words and "things." To be useful, our language must correspond to the events which it represents. Just as it is easy to make a map without bothering to survey the terrain, so we can manipulate

[1] Alfred Korzybski, *Science and Sanity* (Lakeville, Conn., International Non-Aristotelian Library Publishing Co., 1948).

Reprinted from AU-1, *Communication Techniques*, Vol. I, "Individual and Group Communications," Air University, Maxwell AFB, Ala., Rev. Ed. 1978.

words without consulting the facts. Like an inaccurate map, a statement may be inaccurate because it implies a relationship that does not exist. Adolf Hitler could say in 1938, "I desire no more land in Europe," and at the same time his armies were mobilizing for invasion. Nothing in the nature of language prevents words from being used in any way the speaker or writer wishes.

Many people find it profitable to make "verbal maps" which do not fit the facts. We must be constantly aware of this possibility. We must realize that words and "things" may be dissimilar, and that there is no necessary connection between the symbol and the thing symbolized.

Thus far, we have attempted to clarify the nature and purpose of general semantics. To repeat, the objective of general semantics is to make our language correspond to the physical structure of the universe, to make it a more accurate form of representation. Now let us consider three facts about the world in which we live and the impact that these facts have upon our language usage.

FACT OF COMPLEXITY

To illustrate the fact of complexity, let us refer once more to our map analogy. A map of any piece of territory is necessarily a diagram. It cannot represent "all" of the territory. The map can never cover all the minute aspects of the land, buildings, markings, streets, etc. The mapmaker, according to his or her purposes, selects and indicates some aspects while he or she ignores others. What applies to mapmaking applies also to the capacities of language as a form of representation. When we use language, we cannot possibly include in any statement all the features of a situation, all the characteristics or details of an idea or object that we are trying to represent.

Can you think of anything about which your knowledge is complete? Is there any subject of which you can say, "This is all that can be said about it"? To use a simple example, suppose you devoted your lifetime to the study of a lead pencil. Could you learn *all* about the pencil? You could describe it as thoroughly as possible, giving exact measurements and facts about its construction and uses. But to know everything about the pencil, you would have to study the wood and the individual tree from which it was made. Thousands of microscope slides would be needed to acquaint you with each fiber of wood and each grain of graphite. Would you then know *all* about the pencil? You have not yet studied the eraser or the metal band holding the eraser. You have also neglected the molecular structure of the pencil.

The human nervous system can never get all the details of anything. Why is this so? We never get all the details because of the tremendous complexity of the world and the infinite number of factors involved. In speaking and writing we can only abstract some details and omit others. We select certain aspects of the subject to talk about and forget others. Never in our speaking or writing could we possibly say *all* about general semantics, communication skills, air power, or anything else.

Obvious as it may seem, people often forget this little fact. We tend to act as if what we say is all that can be said. Do you know people in your work relationships who sometimes act as if what they say about a certain subject is all that can be said? Do you know people who assume that they know all about a subject even before they have been exposed to it? Such people are afflicted with the disease of "allness." This kind of attitude and behavior leads to tension and conflict, it preserves ignorance, and it blocks further learning. As the years go by, if Air Force people adopt the "we-know-all-about-it" attitude, we are headed for serious trouble. Closed mindedness is mental death.

The kind of attitude we have been discussing is partly a result of the language we use. The structure of the English language implies a finality that does not exist. It implies completeness. A period marks the end of the sentence. The language contains overtones of "allness." What can we do to improve this basic language structure? First, we must be conscious of the abstracting process. We must be aware that in our speaking and writing, we always abstract some details while omitting others. Second, we can make a habit of using a simple device, the "etc.," to remind us that details are invariably left out in speaking and writing. By using the "etc.," silently or orally, we will heighten our awareness that more could be said. If, then, we are conscious of the abstracting process and if we remember the "etc.," our verbal maps will more accurately represent the true complexity of the facts.

FACT OF CHANGE

"The world rolls; the circumstances vary every hour." In our fast-moving world it is important that we remain alert if we are to avoid being surprised by changed conditions. Some things change slowly, some very rapidly. But whether changes are fast or slow, large or small, we live in a world where all things are in process. The stock market, the weather, aircraft design, the waves and currents of the sea, the rattles of the family car—these are but a hint of the gross changes we perceive around us.

If we go below the ordinary levels of sense perception, we find here, too, a very lively world in process. The atom—once thought of as a minute, indivisible, unchanging bit of matter—is now characterized by modern scientists as having a perpetually hurrying, vibrating existence. Thus, our primitive view of unchanging, indestructible, solid "matter" must be replaced by a view which emphasizes the changing character of the universe. If a level of motion and high velocity exists below the ordinary levels of sense perception, we delude ourselves when we look upon the world about us as static and unchanging.

Since we live in a changing world, we must always be willing to resurvey the territory in order to make our verbal maps accurate. Our language is honeycombed with words, especially nouns and pronouns, that suggest fixed, static, unalterable things. Consider the word "desk." Does it connote the dynamic changing character of real life events? Does the word imply anything about process? Rather, as you look at the word, are not its implications static? A note of "all-timeness" surrounds the language; we speak as if life facts were not changing, as if our statements fit for all time.

If our verbal maps are to fit the territory and if that territory is revealed as something in process, then a technique of location should be found to make our statements more accurate. The tool or device that will enable us to reflect this fact of change in our everyday life is the *date*. If we add the date as a subscript to whatever we are thinking or speaking about, the immediate result is to make clear the specific area in which we speak. For example, the Air Force of 1978 is not the Air Force of 1947, the United States Government today is not the United States Government of 1936, and the airman sent to a confinement facility is not the same airman on his or her release later. As long as we live, our nervous systems keep changing.

Many futile arguments take place when people overlook the date. Listen in on a conversation. Airman Smith says, "Blank Air Force Base is a wonderful place. The food at the dining hall is fine. The golfing is good. I don't know why you don't like it." Airman Brown replies, "I don't see how you can stand that place. If that's what you call good food—well! And the golfing—man, you don't know what you're talking about!" So the argument goes, and tempers rise. And all because it is not mutually understood that Airman Smith is talking about Blank Air Force Base 1978 and Airman Brown, about Blank Air Force Base 1975. Both verbal maps are adequate, provided the date of each is known.

Alfred North Whitehead said, "Knowledge keeps no better than fish." Even if it were possible to know all about a subject today, changes in the terrain may make our verbal maps obsolete tomorrow. The territory cannot be surveyed once and for all. By dating our statements we can help prevent old knowledge from blocking new learning. The facts of yesterday may be the fictions of today.

The habitual use or consciousness of dates might well make us more cautious of sweeping statements about men and events. Dates help give to our language a structure that more nearly corresponds to the changing structure of reality. They serve as a constant reminder that no two times are identical, that all things change.

FACT OF DIFFERENCES

We may look for two things that are alike in all respects: two fingerprints, two grains of sand, two peas in a pod, two people, two razor blades, two leaves on a tree. We find many things that are similar, that for our purposes are interchangeable. But we finally conclude that no two things are absolutely identical. Complete sameness between any two of anything has not yet been demonstrated; in some respects each object or happening is unique. On the other hand, despite the discovery of individuality in nature, there are obvious similarities. The ability to observe similarities is a fortunate one. If only differences could be seen, we would be unable to recognize what we had already seen. We could not discern the relation of one thing to another. To live intelligently, we must be conscious of both similarities and differences.

In talking, however, we tend to overplay, or overemphasize, the similarities in our world. We tend to speak as if there were no differences. We abstract the similarities and ignore the differences. Our language tends to imply similarity because we label different things by the same name. We speak of Air Force officers, airmen, politicians, college professors, labor leaders, races, and Communists in such a way as to imply that all members of each group are identical. If the language we use is to be similar in structure to a world of unique individuals, objects, and happenings, we must find a method for using our language to represent both similarities and differences. If we are to make verbal maps that correspond to the territory and have a high degree of predictability, we must remember that thinking in terms of groups can often mislead us.

A simple technique can be used to prevent this emphasis upon similarities from having an adverse effect on our thinking. It is the suggestion that we mentally add the *numbered index* to the group term, for example, Air Force officer^{1}, Air Force officer^{2}, Air Force officer^{3}, etc. Thus we achieve a way of thinking and speaking that helps to remind us of both similarities and differences. The group word, such as "Air Force officer," tells us what the individuals in the class have in common; the group word emphasizes the similarities. The index number reminds us of the differences—that Air Force officer^{2} has a unique personality, different from Air Force officer^{1} and all other Air Force officers. Theoretically, the numbered index enables us to have a specific word or symbol for every person and thing in the universe. Speaking or thinking in terms of the numbered index gives an immediate sense of the facts.

TWO-VALUED TERMS

Another kind of generalizing which we indulge in is speaking in terms of only two values, even though many may exist. Most of us have been taught that it is only fair to "consider *both* sides of every question." The obvious assumption is that every question has only two sides. We tend to think in opposites; we feel that what is not good must be bad. For example, we speak of persons and things as being "sane" or "insane," "black" or "white," "big" or "little," "beautiful" or "ugly," "fast" or "slow," "strong" or "weak," "hot" or "cold," as if these terms could be applied without qualification. According to this way of thinking, "success" becomes even more desirable when it appears to be the only alternative to "failure."

We live in a complicated world that requires careful mapping. We can talk about good things and bad things, true things and false things, but we seldom find things that are in every way as we have described them. While it is possible to call a person "honest" or "dishonest," it is not easy to find one who is totally honest or dishonest. When we study the behavior of individuals, each appears to show these qualities in greater or lesser degree. Our talk tends to create a false picture of the situation.

Although two-valued terms may be useful, we should realize that they tend to conceal the variations necessary to a true description. Such terms often result in elaborate

oversimplifications, and they frequently produce conflict. Moreover, when we classify a person as "stupid," for example, we forget that we are stating our own personal standards as well as our opinion of the other person. We forget that what is expressed in such a statement is an inference rather than a description, a personal judgment rather than a fact, and a relative rather than an absolute value.

The two-valued orientation problem can be countered by using multivalued orientations.[2] This means keeping constantly aware that few situations are either completely white or black but generally some shade of gray. In listening, talking, or writing, we need to orient our values within an ever-changing world. This generally means taking a position along a continuum rather than at the extremes.

SUMMARY

The english language is an ancient, creaking instrument. The essential forms of our language were built in terms of a simple world, a world of little change. The basic structure of that language is still with us. One of the purposes of general semantics is to stimulate some revisions in our language structure, revisions that will make our language a more accurate form of representation. When we come to understand the confusion and conflict that have their origins in our failure to include the *etc.*, to give our statements a *date*, or to use the *numbered index*, we can achieve a considerable change in the structure of our language.

In any attempt to solve human problems connected with command and staff functions, a knowledge of the difficulties inherent in language is of great value. We need constantly to ask such questions as these: do we, as speakers or writers, split verbally what cannot be split in real life? Do we emphasize similarities and ignore differences? Are we conscious that we have omitted details, that we can never say everything about any subject? Does our language suggest a world of process? Are we aware that there are no absolute meanings, that meanings exist only in context? Are we responding to the facts or just to verbal symbols that supposedly represent those facts? With some working knowledge of our own and others' reactions to language, we can communicate much more effectively.

Exercises (011):

1. **Discuss the problems with language.**
2. **Give examples to explain the facts of complexity, change, and differences.**
3. **Explain how the facts of complexity, change, and differences affect our language usage.**
4. **Explain why two-valued terms may be useful and why they should be used cautiously.**

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[2] Daniel E. Griffiths, *Human Relations in School Administration* (New York, Appleton-Century-Crofts, Inc., 1956).

Reading 4

LOGICAL THINKING

REASONING IS often defined as thinking with a purpose. It is also defined as a process of drawing inferences from evidence. Perhaps it is even better to think of reasoning as a means of ordering known data to suggest hypotheses (proposed truths) that can be verified by observation and other kinds of experience. We have found that some ways of arranging data are more useful than others. Generalizations from several selected examples are more helpful than those from few or none at all. Conclusions based on cause-and-effect relationships are more useful than those predicated on coincidence. Acceptable ways of drawing conclusions have become recognized as types of reasoning and are referred to as logical thinking. Unacceptable ways of reasoning are called fallacies. In order to think logically, we must understand the nature of data or evidence, the patterns of reasoning, and common fallacies.

BE SURE YOUR REASONING IS LOGICAL

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012. Summarize the inductive and deductive reasoning processes.

You do three things when you reason: you store data in the form of facts, witness experience, and opinion of authorities; you reach conclusions from data by induction; and you apply principles to specific instances by deduction. In writing to inform or persuade, you need to recognize the kind of reasoning you used, examine it for possible fallacies, and then show how you reasoned and why you think the reader will agree with you. This is the process of giving logical support to writing.

In short, you are most convincing when you use sound logic in your writing and give logical support to your ideas. Just as important, your reasoning is clear to your reader. When you put your ideas across.

The two main types of reasoning used to support conclusions in writing are *induction* and *deduction*. In the following paragraphs, we explain these two types.

Induction. You use inductive reasoning when you arrive at a new principle from known data; you go from experience to general rules. In doing so, you may use one or all of the following processes:

Generalizing. When you generalize, you form a principle from a number of specific instances. You use this process all the time in summing up your own experience. For example, if you say, "Chow dogs bite," you may very well be inferring this from a number of your own experiences. To test for a sound generalization, ask: Are there enough samples and are they representative?

Forming a hypothesis. In forming a hypothesis you prepare a tentative explanation for a set of facts. Usually several hypotheses are possible. The good reasoner formulates as many as he or she can, tests them all, and finally selects one that fits most of the facts. Forming hypotheses is the basis of scientific investigation and problem solving.

Cause-and-effect reasoning. In this type of inductive reasoning, you find the cause of known effects. But you must be sure you have found *sufficient* cause for the effect and that other causes are not in evidence. In other words, be careful not to assume that just because one event *followed* a first, the second event must therefore have been *caused* by the first. This fallacy in reasoning is commonly referred to as "*after* this; therefore, *because* of this." Two events may occur one after the other—one may occur *immediately* after the other—but that fact alone is not proof that the first event caused the second.

Deduction. Deductive reasoning is not as creative as inductive reasoning; it is merely applying accepted rules to specific cases. The rules or principles originally were derived by induction or authority.

Reprinted from AFP 13-2, *Guide for Air Force Writing*, Washington DC: Department of the Air Force, 1 November 1973, pp. 97-105.

You often reason deductively in your writing or speaking, showing why a specific rule applies to a situation. Deductive thinking requires finding the right rule for the instance and then applying it correctly. When you recognize this process in your thinking, you should show it clearly in your writing.

Deduction usually occurs in compressed writing in the statement, "Group discussion is a form of reflective thinking and therefore has method to it," a rule is being implied, which you have to furnish for yourself. In full form, this reasoning would go like this:

Rule: All reflective thinking has method.
Instance: Group discussion is reflective thinking.
Conclusion: Therefore, group discussion has method.

This three-part statement of rule and application is called a *syllogism*. You have to be familiar with its full form so that you can spot its compressed form in your own or another's writing. The full syllogism sometimes is used in writing to point up a rule or assumption.

The principle or rule used in a syllogism usually includes the word "all" or "most," and applies to a class of things. The second statement shows that the present instance falls under the rule. The failure of the second statement to do this is the most common fallacy to guard against when using deduction. Also, the conclusion must be formed correctly. If the syllogism is formulated correctly, the reasoning is valid, provided, of course, that the main principle itself is valid.

Exercises (012):

1. **Explain three processes that may be used in inductive reasoning.**

2. **Explain how syllogisms are used in deductive reasoning.**

GUARD AGAINST SLANTED REASONING AND EMOTIONAL APPEALS

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013. Generalize the various fallacies in reasoning and list ways to avoid these fallacies.

In all communication, you must learn to identify fallacies in reasoning and avoid them. You can improve your thinking and writing by learning to avoid the two most common reasoning fallacies: slanted reasoning and emotional appeals.

Slanted reasoning. Slanted reasoning creates fallacies arising out of misuse of data or types of reasoning. Some of the forms of slanted reasoning follow:

Analogy. An analogy is an assumption that what is true of a simple, familiar situation also is true of a complicated situation. For example:

> War between a great sea power and a great land power would be like pitting a whale against an elephant. Neither could win a victory.

This obviously is unsound argument. Actually, analogy is not a type of reasoning, and is not of any use as proof. But in writing, analogies can be useful in two ways. They are effective in suggesting new ideas or hypotheses to the reader, as when the idea of flying is suggested by using the analogy of soaring hawks and gulls. Analogy also is useful in providing illustrations for points proved in some other way.

Hasty generalization. When using proof by selected instances, doublecheck to ascertain that they represent the whole. If you can think of instances that would as readily prove the opposing view, your reasoning is faulty. To be safe, support your examples with statistical proof. For example, an inspector wrote to a wing commander:

> Several airmen of this command did not know of their opportunity to apply for service schools. Since this is a personnel function, the personnel officer is obviously negligent.

The personnel officer, when questioned, stated that all airmen had been advised. Further investigation revealed that the airmen who had complained had failed to read the notice carefully.

Implication of total when only part is true. Check your statements to be certain that when only some or part is true, you say so. By using the words *some* or *part* in the explanation, you remove all doubt that all or the total is implied. Consider the following statement:

> Since the United States military services have developed operational ballistic missiles, the Air Force can discontinue all experimentation with manned aircraft.

This statement implies that the defense of the United States depends totally on having ballistic missiles. Such an argument isn't logically sound, yet the all or nothing implied might be accepted by the uninformed reader who does not realize the full requirement of an adequate defense.

Faulty dilemma. Faulty dilemma is the dishonest trick of hiding the fact that a reasonable course may exist between the two extremes presented. This is an example:

> The United States is faced with the question of waging a preventive war or staging a retaliatory attack against any aggressor. Since the latter would result in complete destruction, our only recourse is preventive war.

This is poor thinking and therefore poor writing. Air Force policy is to consider all reasonable courses of action. You should analyze reasonable solutions between two extremes before making a final judgment.

Stacking the evidence. Stacking the evidence is the trick of omitting important facts or distorting and arranging the evidence to point a special way. Quoting material out of context and thereby changing its meaning is one way of doing this. The only way to avoid stacking the evidence is to be very sure that you have full evidence, and then indicate it in your writing.

Inconsequent argument. Avoid the argument which states that A must be true because of B when, in fact, A does not follow B at all. For example:

> An officer facing the task of writing a staff study report should concern himself or herself with rules of grammar because his or her prospective readers also concern themselves with correctness of grammar.

Obviously the first statement (A) *that a staff officer facing the task of writing a staff study should concern himself or herself with rules of grammar* is not true simply because (B) *his or her prospective readers also concern themselves with correctness of grammar.* It is easy to see faulty judgment which is based on facts or arguments unrelated to each other. The difficulty comes in detecting the unrelated arguments.

Loaded question. The loaded question is the device of including an assumption in an ordinary question, for example: "When will we stop approving excessive budgets?" This subject would be better discussed under the question: "Are we approving excessive budgets?" A good writer is careful to state questions in neutral terms without loading assumptions or answers into them.

Ignoring the question. Ignoring the question is the conscious or unconscious habit of wandering off the main topic and discussing another. A good writer always is careful to follow his organization and stay with his or her main topic.

Accepting compromise. Sometimes a compromise may not be the best solution to a problem. The best answer may be one of the two extremes. For example, in a staff study report on the problem of whether ROTC personnel should receive generalized or specialized training, the writer:

1. Established that personnel were of differing opinions, one group favored generalized training, the other specialized training.
2. Concluded that ROTC training should be partially specialized and partially generalized, based simply on the equal number favoring each training type.

The appeal to compromise as outlined above is so obvious that a reader would not likely be misled by it. In the complete study, however, the supporting arguments from both groups were so strong that the reader still could be misled into accepting the compromise.

Before recommending a compromise, the communicator should ask himself or herself: Is compromise actually the best solution to this problem? In the example above, is specialized training feasible?

Authority out of his or her field. Check your information to ascertain that your source material is by a qualified authority and not supported by the prestige of rank, position, or title alone. Frequently, because of position or expertise in one field, a person is quoted on subjects entirely unrelated to his or her experience or specialty. When this is done, the prestige of position is being falsely used to prove the validity of the writer's argument.

Emotional appeals. The temptation is always present, even in military writing and speaking, to try to convince the reader by any possible means, including emotional appeals. These are attempts to cause the reader to agree with you by playing on his or her self-interest. The following paragraphs discuss some common types of emotional appeals.

Emotionally charged words. Some words are literally charged with emotion; therefore, avoid them in objective, logical reasoning and writing. Do they honestly describe the object, person, or act? If not, translate them into neutral words. A good illustration of emotionally charged words in the statement, "I am *firm;* you are *stubborn;* he or she is *pigheaded.*" All three words connotate a person not easily influenced by the opinion of others. Yet, emotionally, *stubborn* and *pigheaded* mean something bad, *firm* something good.

Name calling. Name calling is similar to using emotionally charged words. It is the habit of giving undesirable names to the things you dislike, such as calling an opponent a *reactionary* or *radical.* Obviously, as soon as you use name calling, you are no longer discussing your subject logically.

Reputation as sole support of a judgment. Guard against opinions based solely on the argument that because somebody has already adopted a proposal, it is *good* or *bad* (depending on the user's reputation). For example, someone wrote:

> That the Army and Navy are using the system indicates that the Air Force could benefit by following their example.

Obviously, such a statement as the sole basis of reasoning isn't logical.

Glittering generality. This is similar to reverse name calling. It is the device of using good labels to transfer approval to an idea. A writer ended a letter, for example, with the following statement: *The principles of good military management urge adoption of this course of action.* Unless further investigation proved that the principles of "good" military management did apply to this course of action, the writer had used a glittering generality to encourage acceptance of his or her idea.

Catch phrases as premises. Catch phrases frequently are used in waging political or propaganda warfare. They

have little place in Air Force writing which requires facts and truth. Typical examples of these phrases are:

> We've never lost a war and never won a peace: therefore, ...
>
> For every weapon of attack there is always a corresponding weapon of defense; therefore . . . .

Catch phrases often penetrate a reader's mind and stick there even though he or she may recognize them to be faulty.

Bandwagon appeal. The fallacy of the bandwagon is the appeal to public opinion to prove a point. It often is seen in the phrase, "Everybody knows that. . . ." For example someone wrote:

> Everybody agrees that leadership training is the most important part of an officer's career.

This statement appeals only to the reader who happens to agree that everybody should think this way. The use of this appeal is the opposite of reasonable writing. It asks the reader to accept an idea without examination, and to believe it because his or her social group believes it.

Checklist

HAVE YOU USED OBJECTIVE, SOUND REASONING?

1. Have you been completely objective in your reasoning?
   a. Have you considered all possible objectives to your conclusions?
   b. Have you considered all possible disadvantages to your recommendations?
2. Have you discussed or indicated those objections and disadvantages in your writing?
3. Have you used logical reasoning?
   a. Is your inductive reasoning sound?
   b. Is your deductive reasoning sound?
4. Have you checked your reasoning for possible fallacies?
   a. Is your writing free of slanted reasoning?
   b. Is your writing free of emotional appeals?
5. Does your writing clearly show your reasoning?
   a. Have you clearly shown how you reasoned?
   b. Have you indicated why you think the reader will agree with your reasoning?

Exercises (013):

1. List and explain ten forms of slanted reasoning.

2. List at least one method to overcome each of the forms of slanted reasoning listed above.

3. List and explain five types of emotional appeals?

NONVERBAL COMMUNICATION

VERBAL COMMUNICATION is the transmission of a set of abstract symbols or language. Communication through other means than abstract symbols (words) is nonverbal communication. For centuries, scholars have studied and written about the use of language. But only in recent years have we recognized nonverbal communication as an important part of the communication process. Our slow development in this area stems from our inability to observe and capture the messages of the body and develop materials for study. The phenomena are simultaneously familiar and elusive—an almost fa[illegible] combination. The nonverbal communication process is so different from verbal communication in its variety, speed, and ease of reading that we are seldom conscious of what we have seen.

The growing importance of nonverbal communication is best demonstrated by the increasing number of advocates of the discipline and their comments. As we have seen, one of the basic principles of communication is that a person cannot *not* communicate.[1] This suggests that an individual in the presence of one or more other individuals constantly communicates meaning. Birdwhistell states: "Man is a multi-sensorial being. Occasionally he verbalizes."[2] On the basis of his research, Mehrabian concludes that, in communicating attitudes and feelings, words account for only 7 percent of the meaning; variations in the voice provide 38 percent of the meaning, and other nonverbal means carry 55 percent.[3]

Clearly, nonverbal communication is an important part of the communication process. In considering the importance of nonverbal communication, imagine the difference between a speech delivered to an audience and the written text of the speech as it may appear in the newspaper. The difference is primarily the loss of the nonverbal communication that supplemented and enhanced the speech.

In our investigation of the nonverbal communication process, we can subdivide the discipline into two general categories. These categories are personal nonverbal symbols and nonpersonal nonverbal symbols. The first category represents the sciences of the voice and kinesics*, and the second emphasizes our use and manipulation of the material world.

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014. Explain nonverbal communication.

NONPERSONAL SYMBOLS

Edward T. Hall,[4] an anthropologist, has written extensively about the individual's use of space, time, and materials to send strong messages.

Space. Compare the message sent by a supervisor who places a visitor's chair near the side of the desk with the message of the supervisor who places the visitor's chair some distance away in front of the desk. The first position obviously implies that conversation and communication are welcome. The distance and the barrier of the desk in the second position creates the image of a supervisor who frowns on intimacy and conversation.

A major violation of good speech principles is the use of space as a barrier to communication. This is especially true in the placement of office furniture. You can create no greater barrier than to move a visitor's chair to the side of your desk and then place a stacked in/out basket or potted plant between you and the chair.

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[1] Paul Watzlawick, et al. *Pragmatics of Human Communication*. (New York: W. W. Norton, 1967).

[2] Ray L. Birdwhistell, *Kinesics and Context*. (Philadelphia: University of Pennsylvania Press, 1970).

[3] Albert Mehrabian, *Silent Messages*. (Belmont, CA: Wadsworth, 1971).

[4] Edward T. Hall, *The Silent Language*. (Greenwich, Conn: Fawcett, 1959).

**Kinesics* is the systematic study of the relationship between nonlinguistic body motions—blushes, shrugs, eye movement, etc.—and communication.

Reprinted from AU-1, *Communication Techniques*, Vol I, "Individual and Group Communications," Air University, Maxwell AFB, AL, Rev. Ed. 1978.

Time. In the process of communicating, we may use several dimensions of time, depending on the messages that we send—technical time, formal time, and informal time. Technical time, measured with precise instruments, is used when time itself is important, as in sporting events or safety drills. The most commonly used variation of time is formal time, measured in labeled units (hours, days, etc). We use formal time to focus attention on the topic, task, or individual and not on the time itself. We characterize informal time with vague references, such as "after a while" or "when you get a chance" to indicate that neither the time nor the content requires emphasis.

Our manner and behavior as we combine and use these classifications of time add further meaning to our messages. When we impose unreasonable limits on our appointments with an individual or continue to work on a task during an interview, our message is clear. By resorting to informal time while the other person functions on formal time, we indicate that we do not recognize the importance of the other person's time. When a husband spends little time with his wife or when a father insists that a child should stop talking and come to the point, he communicates a message about these relationships. All individuals communicate messages about themselves and their associates in the ways that they use the dimensions of time.

Materials. Just as we communicate messages through our use of time, we also communicate with other people in the kinds and styles of clothing that we wear. Our use of colors, the values that we place on material things, and the care that we give to our possessions communicate messages to others. Restraints that we place on other people in their use of our new car, a new rug, or new dishes contain messages of our attitudes toward people. Our appearance and the appearance of our possessions reveal much about our willingness to communicate or to become involved with other people.

PERSONAL SYMBOLS

Major attention in recent years has centered on a category of nonverbal communication transmitted by the human body. Beyond the role of voice in communication, we have begun to study the effect of eyes, the face, posture and even our outward extension into space.

Voice. To understand the nature of nonverbal communication between ourselves and others, we must examine communication vehicles other than words used to carry meaning. As Mehrabian points out, meaning can be attached to all the variables of the human voice. The simple phrase, "I love you," can be expressed in almost infinite variations with an infinite number of meanings because of variations in the rate, pitch, loudness, and quality of the voice.

Quantitatively, the voice has traditionally been studied as a source of verbal punctuation. We are now studying the voice qualitatively to identify fear, hesitation, confidence, and other such qualities.

Eyes. The human eye produces vision and provides the primary source of our perceptive ability, but it also has many expressive abilities, some of which are unique. Research in visual perception has been extensive and well cataloged, but research in the projective abilities of the eyes has not been given the same consideration.

The eyes have two general projective skills or qualities. The first is eye contact, the momentary union of two individuals' visual zones. Jean-Paul Sartre has identified this phenomenon as the means through which man recognizes others as human beings.[5] However, eye contact implies more than mere recognition of human worth and value. The degree of eye contact also projects a wide array of nonverbal messages. Most cultures have a range of acceptable time for eye contact, and people who stay within this range accord other people "civil inattention." Any variation from this range changes the projected message. A lack of visual attention causes feelings of isolation and invisibility, and overattention quickly becomes either threatening or embarrassing. Another complication is that the limits of civil inattention vary with cultural and social changes.

The second quality is that of a process traffic cop. When two or more visually equipped human beings are involved in a communication process, their glances determine the direction and quality of the process. Whether they are engaged in everyday conversation or formal discussion groups, the changing pattern of glances initiates and controls conversation. Visual guidance dictates who is talking and how long the speaker has the floor, and this guidance influences both the direction and depth of the remarks of others. We can experience the degree of process control exercised by the eyes by observing situations of absence. For example, have you ever plowed into a topic in a group discussion only to find everyone looking the other way? Or have you ever had an awkward feeling as you tried to talk to someone who, because of blindness or some other difficulty, was unable to provide visual contact?

Facial expressions. Of a total of 50 to 60 kinemes (movements that have contextual meaning) identified by Birdwhistell, no less than 33 involve the face and head. With its variety of surfaces and rapid muscular changes, the human face is a made-to-order communications transmitter. In addition to creating numerous facial expressions, the individual can project these expressions at any speed, and they may be either honest or false expressions.

Although tied strongly to cultural denotations, facial expressions are often the first step across cultural lines. In almost all cultures, people smile in friendship or snarl when they are unfriendly. The unique thing about the structure of facial messages is that, unlike a verbal sentence that can be perceived word by word, the face combines the elements of the message and flashes them all at once. At times, these flashes occur at near subliminal rates. We recognize one firm rule in regard to message

[5] As cited by Flora Davis, *Inside Intuition*, (New York: McGraw-Hill, 1973), p. 67.

length: the shorter the message, the purer the representation of the emotion and the more honest the emotion.[4]

Body language. In conjunction with the face, the movements of the rest of the body combine to create the science of kinesics, or body language. For years, speech teachers have studied posture in their attempts to find a one-to-one correlation between emotion and specific body postures. The end result of their studies has been an occasional wave of popularity for various schools of mechanical delivery and the realization that a one-to-one correlation between emotion and specific body posture does not exist. Like words in a sentence, body movements express meaning in context; however, unlike words, single motions are seldom definable. This is best illustrated by duplicate movements that have varied meanings in different situations. Many popular paperbacks have dealt with certain specific classifications of courtship behaviors, such as palming, preening, and surrogate touching. Obviously, in one context, these are courting behaviors and they communicate one individual's sexual desire for another person. However, the same behaviors can be observed in a group discussion, between members of an athletic team, or among members of a family. In their asexual context, these behaviors are called quasi-courtship behaviors. They are associated with moments of real rapport and are related to a feeling within the individuals involved of alertness, well-being, and involvement. The key to assessing body language is context. And, since kinesic messages, like facial expressions, are total messages present at one time, they produce a weak correlation between body language and verbal language.

Zones of interaction. Earlier we probed the concept of space as it relates to the placement of material items. The same analysis can be made in relation to the placement of people. People associate certain types of behavior and interaction with the distance between individuals.

The zones of interaction observed by most people are culturally defined. In our American culture, we tend to observe well-defined spatial zones in specific types of social interactions. The first zone of interaction is the *intimate zone* ranging from 0-18 inches. We reserve this zone for lovers, very close friends, and children. When a person enters our intimate zone, we become nervous, uneasy, and even hostile if we feel the person is trespassing. The second zone is the *personal zone* ranging from 1½-4 feet. We reserve this zone for friends and companions during conversation. Like the intimate zone, this zone is also subject to hostile protection from intruders. Conversely, if a person whom we wish in our intimate zone moves to our personal zone, we often react as though we are being punished.

We most commonly reserve the first two zones for interactions in our personal lives, but we also maintain two additional zones. The third or *social zone* ranges from 4-12 feet. We use this zone in public interactions when we are willing to accept the existence of two-way communications. This distance includes the normal depth of the boss's desk or the area that we prefer between neighboring work stations and other individuals with whom we are willing to converse. The fourth zone is the *public zone* ranging from a minimum distance of 12 feet to an indefinite maximum distance. We reserve this zone for public appearances in which verbal interaction is not desired. We use it for classroom lectures, political speeches, and public appearances of heads of state.

Knowledge of the techniques of nonverbal communication can be helpful in two ways. First, an understanding of nonverbal techniques and behavior can enhance our ability to receive meaning from others. Second, an awareness that we also send nonverbal messages can focus our attention on the kinds of messages that we send, and enhance our ability to communicate meaning to others. When verbal meanings do not coincide with nonverbal messages, the result is a mixed message. The listener is often confused. When this happens, the listener accepts the nonverbal message. We can overcome mixed messages by practicing honesty in our conversation. Being honest will enable us to avoid the contradiction between verbal and nonverbal messages or bring the nonverbal in line with the verbal.

Interpreting nonverbal communications. The interpretation of nonverbal behavior is fairly complex. If we think in terms of a potential nonverbal message as a cue, then it is evident that most human behavior can be considered as a series of cues. The receiver may or may not be aware of the cue provided by the sender. Insensitivity to the cues sent by others is the first possible source of breakdown in the process of nonverbal communication. If the receivers are aware of a given cue, then they must decide whether it is meaningful. At this point, they may decide that the cue is meaningful when it is not or that it is not meaningful when it is. These choices represent two more possibilities for errors in understanding nonverbal communication. If the receivers decide that a cue is indeed meaningful, then they must interpret the meaning. This, too, is a source of error. The number of possible misinterpretations is unlimited. On this basis, it seems that nonverbal communication may be so uncertain and subject to errors that we should ignore it in our serious efforts to communicate.

Although nonverbal communication is not an exact process, everything that we can learn from it either enhances our interpretation of the verbal message or supplies us with some insight into situations that otherwise would be difficult to interpret. In many situations, when patterns of behavior are observed and especially when they reoccur, the nonverbal message can be interpreted more accurately than the verbal.

To improve our ability to interpret nonverbal communication, we should start with the source of error listed above and determine how to reduce errors at each juncture. Most of us read far more nonverbal cues than we realize. But without a conscious effort, we also miss

[4] Davis, *Inside Intuition*, p. 58.

many quite meaningful cues. The starting point is to deepen our awareness of nonverbal cues simply by paying deliberate attention to them. If we care about other people and if we are interested in communicating with them, we have already achieved a high level of sensitivity. If not, a good starting point is to learn to care for others and develop our interest in them.

We cannot decide whether a given cue is meaningful in isolation from the total situation. An isolated segment of human behavior, unlike words, has no meaning in and of itself. Patterns of behavior often do carry meaning. Since human beings imitate each other, all of us learn to express ourselves nonverbally in recognizable patterns. Careful observation, recognition of consistency, and the interrelations of behavior with verbal communication are the bases for deciding whether a cue is meaningful.

Mixed messages. When we communicate, we send one message with our words and another message with our nonverbal behavior. As we have seen, when these messages are different or contradict each other: we send what are known as mixed messages. When the words say one thing and our actions say another, the receiver is confused. When this happens, the receiver tends to accept the nonverbal message and to reject the verbal, and we wonder why our verbal message was not accepted.

Nonverbal communication has its source in the feelings and attitudes of the individual. While the verbal code is used primarily to communicate cognitive material, nonverbal behavior spontaneously communicates affective materials. In order to avoid sending mixed messages and insure that the nonverbal message supplements and enhances the verbal, senders must be aware of their feelings and attitudes and be honest and open in their communication with others. Only then can they be assured their verbal and nonverbal messages are congruent.

SUMMARY

The major portion of our daily communication is nonverbal, yet, it is probably the least understood element of the communication process. Its combined characteristics of being both familiar and elusive have left many people in the position of wondering, "When did I say that?" We are surrounded by channels of nonverbal communication. In fact, we are so surrounded that they have become old friends. Our immediate need is to be aware of the nonverbal messages being communicated by ourselves and others through the personal means of voice, eyes, and body as well as the nonpersonal means of time, space, and materials. As we develop this awareness and learn to be ourselves when we communicate with others, our verbal and nonverbal messages will be consistent.

Exercises (014):

1. **Explain how nonpersonal and personal symbols affect nonverbal communication.**

2. **Explain how facial expression and body language influence communication.**

3. **State two ways in which nonverbal communication techniques can enhance our ability to communicate meaning to others.**

Lesson 3

LISTENING EFFECTIVELY

Lesson Objective: Comprehend the elements of effective listening.

Introduction: Often, hearing is mistaken for listening, and entire messages are garbled or lost because of a lack of active, effective listening. Listening is a skill that must be developed just as writing or speaking, although that fact is most often ignored or misunderstood. Reading 1, "Listening," defines listening and describes some techniques and requirements to be an effective listener. Reading 2, "Effective Listening," describes the benefits of good listening to all concerned, addresses some common problems involved in listening, and offers suggestions to overcome these problems and increase listening effectiveness.

LISTENING

LISTENING is one of the most neglected of the communication skills. Traditionally, most of us have not used this skill well; we have often neglected to assume our share of responsibility in the communication process. Many poor listeners have tried to place the entire burden of the "speaker-listener" process on the speaker. The listener who sleeps through a lecture, for example, is apt to make the excuse that the speaker was dull. The listener who fails to recognize and grasp the speaker's main thoughts is likely to say that the presentation was poor. Such reactions from listeners are usually rationalizations for their own inattentiveness.

Certainly, speakers do initiate the communication process, and they have a certain responsibility for controlling it. Yet they should not be held entirely accountable for the failure of members in the audience to listen. Successful communication depends upon cooperation between the communicator and the receptor.

How many opportunities to listen do we have in one day of our life? How well do we use these opportunities? How much do our professional relationships, social life, and education depend upon our ability to listen? Adults spend considerably more time listening each day than they do in any of the other communication skills of speaking, reading, or writing. Air Force people spend about 45 percent of a normal working day in situations offering opportunities to listen; at school, this percentage is much higher. Results of research at civilian universities give a similar figure for people outside the military. This percentage alone emphasizes the importance of effective listening habits.

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015. Explain what is involved in good listening.

WHAT IS LISTENING?

Hearing is not listening. We hear, often without listening, whenever sound waves strike our eardrums. We cannot honestly say that we have listened. Frequently, we do not remember what we hear, because we did not listen. Almost everyone has been embarrassed by not knowing the name of a new acquaintance because of failure to listen when the person was introduced. Even if we remember, we do not necessarily get the most from our listening. A donkey is not rich simply because it carries gold on its back, nor are we wise simply because we carry a mass of memorized facts in our heads. Facts, memorized without an understanding of their significance are as worthless to us as gold to a donkey. In a broad sense, then, listening means hearing, comprehending, and remembering. To do these things, we must concentrate on what we hear. We must be willing to put keen effort into the listening process.

Students frequently complain that they cannot retain as much of what they hear as they should. Their problem is probably caused by failure to concentrate.

By definition, concentration is "close mental application, exclusive attention." From time to time, stories circulate about some "genius" who can simultaneously read a book, converse with a spouse, hear the President speak by radio, and abstract the important ideas of each. Few people match this performance; in fact, most people have to work at focusing attention on even *one* subject for any length of time.

The behavior of the mind can be compared to the flow of a river. A river meanders, finding and following the course of least resistance from the mountain to the sea. Every navigable river, however, has a safe channel. The captain who wants to take a ship up and down the river and into the ports on his itinerary, keeps the ship in that channel. Like the river, the human mind tends to wander, but objective listeners keep their attention in a mental channel, the channel of concentration. Whenever we allow our minds to stray, to slip into a whirlpool, to drift into shallow water, or to run aground, we let the current of the spoken ideas in the channel pass us by. Our attention may get back into the current, but it can rarely catch up with the speaker's ideas. What can we do to channel our attention? The secret lies in forming good listening habits.

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FORMING GOOD LISTENING HABITS

The knack of listening effectively is not a gift; it is acquired through practice and hard work. Anyone who wants to become a better listener can do so by practicing the following seven rules at every opportunity.

Get ready to listen. Listening requires physical and mental preparation. The physical preparation for listening can be compared with that for catching a plane. If you expect to be a passenger on a plane departing at 2000, you must check your baggage, find your seat, fasten your safety belt, and be awaiting takeoff before that time. The same is true of the listening situation. First, we must check our baggage, that is, put away newspapers, books, and other extraneous material. Then we must seat ourselves comfortably before the speaker begins. We should insofar as possible, prepare to listen to the speaker by mentally "tuning out" distractors such as noise or minor physical discomforts. We should be physically relaxed but mentally alert, with pencil and paper at hand for taking notes. Only then will we be ready to travel along with the speaker.

At this point, the analogy between catching a plane and listening may appear to break down, for if the listener and the speaker are in the same room, they cannot travel far from each other. Yet, despite their physical proximity, the listener and the speaker do not necessarily travel in the same channels of thoughts and ideas. By failing to listen to the speaker's opening remarks, members of an audience miss the basic structure of the speaker's topic development.

Physical preparation is not enough; mental preparation is also essential to good listening. The listener should be ready to "tune in" on the speaker's mental wave length. How do we prepare ourselves to do this? We start by reviewing our own knowledge of the subject to be covered and then trying to imagine what the speaker will say. Just as we would study a map before starting on a trip into an unfamiliar area, we must study a mental map of the area through which a speaker is likely to take us. We should review schedules or other program data which might give us preliminary information about a speaker's topic or lesson. We must find material on the subject of the lecture and read it. If we already know something about the topic, we should *think* about it and consider what we would say if we were the speaker. This part of the preparation helps us to recognize the core of experience we have in common with the speaker. By taking to the lecture as much knowledge of the subject as possible, we increase the probability of valuable two-way communication.

Take the responsibility for comprehending. Frequently, an instructor will have a student whose attitude speaks for itself: "Here I am; teach me—if you can!" Such students believe knowledge can be poured into them as water is poured into a jug. They will not get the full benefit of any lecture or lesson until they learn that the successful listening or learning situation demands something of the listener as well as of the speaker. Speakers frequently use examples to support points they wish to stress. The listeners who feel responsible for comprehending look for similar examples within their own experience and apply the point to themselves or their jobs.

Another way to increase comprehension is to rephrase ideas. In describing poor reading habits, a speaker might say, "The reader in this example has too many fixations per line." A listener might rephrase the statement: "This reader allows his eyes to stop too many times on one line of type." Rephrasing in this way helps the listener understand and retain the speaker's ideas. Basically, the listener is putting the speaker's words into a more familiar vocabulary.

Listen to understand rather than to refute. Critical listening is a good practice, but we do not achieve it by criticizing the speaker's thoughts before the speech is finished. Silent argument with a speaker during the speech can be a waste of time. In a learning environment, the thoughtful listener will analyze but not mentally argue with the teacher or lecturer during the lecture. Without honestly attempting to get the speaker's message, no listener can be informed well enough to evaluate the ideas intelligently. We should listen and wait; we should try to understand first and evaluate second. Some or all ideas may deserve to be questioned and tested, but the testing should come after a speech or lesson is finished. On the other hand, the responsible listener may find that no disagreement exists.

Control the emotions. No one who is reacting to the world around him or her can be completely calm. In the learning situation, however, listeners should not permit emotional blocks to develop between themselves and the speaker. How can we be unbiased listeners? If, for example, we are annoyed by a speaker's manner, how can we remain objective about the speaker's ideas? We can isolate the source of our annoyance—the speaker's vocabulary, dress, or mannerisms—by analyzing the reasons for our negative emotional responses to them, often minimize their effects on us. As intelligent listeners, we must not permit emotional blocks to prevent our understanding of a speaker's ideas. Actually, if we are responsive listeners, we will try to help the speaker rather than to react unfavorably to him. We can assist the speaker best by merely displaying an overt interest.

Sometimes, certain words trigger certain emotions. Many terms, such as "Red," "Socialist," "automation," and "collector of internal revenue" are emotionally loaded. Everyone has experienced emotional blocks upon hearing certain words. If we are to profit from our listening experiences, we should make lists of the words that affect us emotionally. By identifying and understanding them as blocks to communication, we can gradually force ourselves to react to speakers' ideas rather than to their vocabularies.

Listen for main ideas. It is possible to become too involved in details. The person who boasts, "I listen for the facts," may actually be a poor listener. By

concentrating exclusively on individual supporting points, he or she may miss the main ideas. Fact A, Fact B, and Fact C may be interesting for their own sakes, but the speaker's reasons for offering these facts may be to derive an important generalization from them. Realizing this, the alert listener learns to distinguish between main thoughts and the less important supporting ideas. Dr. Ralph G. Nichols states in *Readings in Management:* "We asked the 100 best listeners (in a research project) what they concentrated on in a listening situation and a bit timidly they testified, 'When we listen, we try to get the gist of it—the main idea!'"[1]

By building a mental structure of the ideas in a lecture, we gain a basis for weighing their importance. How has the speaker organized the main points? What organizational pattern has been used? Is a main point presented and then supported, or does the speaker use the opposite approach? Both approaches are effective, and both are commonly used in oral communication. We must look for the relationship of examples, comparisons, and testimony to the ideas they support. If we have previewed the subject matter, our listening task becomes easier. But attempting to make a blueprint of another person's speech in advance is not easy. Practice is required to perfect this skill. Everyone has opportunities to identify the purpose of a speech and to visualize the organizational pattern—at church, at educational lectures, in the classroom, on television, and at political rallies. Practice will improve the proficiency of the listener who uses these opportunities.

All of us can increase our own store of knowledge and understanding by listening for the main ideas in a speech. Most people want to know more about many subjects than they have time to learn through personal research. By listening intelligently, we can benefit from the research, experience, and thinking of speakers who are knowledgeable in a wide variety of fields.

Be mentally agile. Concentrating throughout a speech is a challenge, because people do not think and speak at the same rates. Most of us think much faster than the normal speaker can possibly talk. This rate differential gives our minds the time and opportunity to stray from the speaker's subject. But if we have disciplined our minds, we can use this spare time to review what the speaker has said and to predict what will come next. Thus, we profit from two practices essential to learning: mental activity and repetition. The alert listener has ample time, mentally, to repeat, forecast, summarize, and paraphrase the speaker's remarks. This practice increases comprehension and aids retention.

Take notes. We should make a pattern of the ideas we hear as the lecture unfolds. We should think and rethink an idea and then jot it down. In an unpublished research paper, Dr. Charles V. Irvin, Michigan State University, concludes that the comprehension and retention records of students who take notes are consistently better than those of students who do not. We should always take notes at teaching lectures. We should establish and use a note-taking system that works for us. If we follow our system and establish the habit of reviewing our notes at the same time every day, our comprehension and memory will improve.

The suggestions for getting ready to listen also apply to taking notes. We should go to the lecture hall or classroom in time to have our materials ready before the lecture starts. If we use a separate sheet of paper or note card for each lecture, our notes will be easier to use later on. By using only one side of the paper and leaving enough marginal space, we can easily make any clarifying notes we may wish to add later from other sources. One efficient system is to use a loose-leaf folder with separate sections for each subject or area covered in a course or lecture series.

Notes should include the speaker's main ideas and enough supporting details to make the main ideas clear. Yet, we cannot afford to let the notetaking process interfere with our understanding of what the speaker is saying. The main function of notes is to aid the listener or observer in reconstructing the oral communication when it is ended. It is helpful to use abbreviations or to jot down key or cue words rather than complete sentences. When we try to take down the speaker's exact words, we risk losing the continuity of the thoughts and, therefore, the purpose of the lecture. In only one instance is it wise to take verbatim notes: for purposes of clarity, definitions of key words should be taken down just as the speaker expresses them.

We should watch for "road signs" indicating that the speaker is moving from one main idea to another: such transitions as "another point is" and "in contrast to what I've just said." Notes should be as brief as possible, yet readily understandable. Each note should help us recall one of the speaker's ideas. Good notes actually outline the speech.

We should review and expand our notes as soon after a lecture as possible. This review permits us to "relive the experience," thereby strengthening our memory of the most important ideas.

SUMMARY

The art of listening warrants the best efforts of those who wish to understand and use ideas verbally expressed by others. The listener cannot listen passively and expect to retain much. Although alert listening requires effort, it is still one of the best ways to gain knowledge and understanding. Our opportunities to listen are numerous. We shall be better listeners if we first give the speaker our careful *attention*. We can improve our *comprehension* if we try to understand the speaker's point of view. Most forgetting occurs immediately after learning. To *retain* the most important ideas, we must diligently seek and catch the main ideas. Reasonably brief notes—taken during a speech and expanded later—will help to stamp in the most important ideas for later use.

[1] Max D. Richards and William A. Nielander, *Readings in Management* (Cincinnati, Ohio, Southwestern Publishing Co., 1963) Chapter, "Listening is Good Business."

Exercises (015):

1. **Define listening.**
2. **Discuss the rules for good listening habits.**

Reading 2

EFFECTIVE LISTENING

WHEN Marilyn Hazelton finished her Ph.D. and became a lecturer in European history at a state university, she was not prepared for the "television generation" that would make up most of her classes. These students were the most passive audience she had ever faced. Perhaps as a result of having watched dozens of hours of television for most of their lives, the students would sit back, stare passively at their instructors, and seem to be saying, "O.K., I'm waiting. Get my attention, pull me along through the material, and fill me up with information." To Marilyn, getting them to respond to her attempts at two-way communication was like "pulling teeth." She went to uncommon efforts to organize her lectures and to make them interesting. But the results of the exams told the story. Her students knew little more about European history at the end of the semester than they had known at the beginning. Marilyn Hazelton was to some extent the victim of an audience that had never learned how to listen.

Michael Cohen had been on the debate team in college and had achieved great competitive success as a fluent and persuasive speaker. He had experienced the intoxication of impressing audiences and receiving their praise. Now a junior-level supervisor in a large company, he sought out opportunities to make presentations—to employees, to colleagues in business conferences, and to public audiences as a company representative. Michael had only one problem as a communicator. He preferred being on the sending end of any transaction. In a receiver's role, he was frankly bored by others' presentations and usually let his mind wander or, worse yet, thought of ways to make the sender's message more stimulating. The result was that over time Michael missed significant amounts of important information. For example, during conferences he would be thinking so deeply about his eventual contribution to the decision-making process that he was unaware of what others were saying. His comments were thus redundant or even irrelevant. In casual conversations, he would cut people off and then expound at length on his own viewpoints. Michael began to get a reputation as someone who was self-centered, overly impressed with his own abilities, and insensitive to the ideas and feelings of others. He soon discovered that some of his best ideas were being ignored. Michael Cohen had become a victim of his own poor listening habits.

IMPORTANCE OF GOOD LISTENING SKILLS

016. Discuss the benefits of good listening.

Although the public speaker has many responsibilities, one that is frequently ignored is the need to be a good receiver as well as sender of messages. And of all the factors that affect the outcome of a communication event, the one over which he has relatively less control is the listening habits of his audience. Thus, while a good speaker may make his presentation as interesting and imaginative as possible, he is still unable to command his audience to listen if they choose not to.

Communication is a two-way street, requiring the mutual effort of both sender and receiver. In the case of public speaking, listening is the counterpart skill necessary for effective communication. Listening is, in some respects, the most significant of our four verbal skills—reading, writing, speaking, and listening. Of the four skills, an estimated 25 percent of our communication time is engaged in reading and writing combined. About 30 percent of our time is spent talking, and about 45 percent of our time we are engaged in listening. Furthermore, common estimates suggest that as much as 85 percent of our total knowledge comes to us through the listening process.

Benefits to the listener. Good listening is important to anyone who interacts with others, but it is particularly important in the public speaking arena. First, it helps the

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listener. It does so by allowing us to gain maximum benefit from messages, to absorb, comprehend, and retain much more information. This material can usually be applied or adapted for later use. Good listening is also essential for effective evaluation of information which, in turn, is an important tool for effective decision-making. In addition, many speaking situations call for the listener either to respond actively to a speaker or to adapt to the speech content. Obviously, good listeners are more able to respond intelligently and articulately in such situations. In general, they are better equipped to enjoy, understand, and evaluate the messages they hear. The results of their efforts are often reflected in fuller appreciation of recreational experiences (such as movie-going, television viewing, concert attendance), better job performance, more careful decision-making, and happier relationships with others.

Benefits to the speaker. Good listening also benefits the *speaker*. You may realize from your own experience that it is much easier (and more enjoyable) to speak to an audience that is attentive and involved, as opposed to one that is hostile, bored, or distracted. The very act of demonstrating interest provides impetus for a speaker to do a better job. Message delivery is often improved, and the feedback provided by an audience of active listeners generally helps the speaker adjust his message to the listeners' needs. For instance, an alert speaker might be able to tell when an idea or concept needs expansion or when the audience has sufficient information to move on to the next point. So an audience of effective listeners enhances the speaker's presentation by giving him valuable information that allows him to modify his message.

Social benefits. Good listening provides *social benefits*. The concepts of democracy and free enterprise are based on the notion of intelligent, critical decision-makers. The listener who can both understand and carefully evaluate a speaker's message is capable of making better social, economic, and political decisions. Furthermore, it is this kind of individual who serves as the conscience and watchdog for public speakers and message-senders in every sector of public life.

Improvement of public speaking. Good listening *improves public speaking skills*. It does so in two ways. First, when we listen better to the speeches of others, we acquire a greater range of materials that we can use in our own speeches. Some of the most interesting public speakers are people who have themselves picked up facts, ideas, and anecdotes from listening to others. Two techniques we suggest for gathering materials are "using one's own background" and "personal observation." Notice that both [of] these resources assume that we have absorbed information from the people around us. And how do we perceive, comprehend, and retain this information? As noted above, a significant amount comes from listening.

A second way in which we improve our speaking skills is through critical listening—evaluating the message behavior of other speakers. Most speech instructors can attest to their personal improvement as speakers simply because they have heard and critically evaluated the speeches of others. Similarly, audience members who know that they will sometimes be in the role of speaker rather than listener should perceive the communication event on two levels: the *content* level, or the apparent meaning of the speaker's message; and the *process* level, or how the speaker is doing as a communicator.

Exercises (016):

1. **Explain the benefits of good listening to the listeners.**
2. **Discuss the benefits of good listening to the speaker.**
3. **What are the social benefits and improvements of public speaking to be gained from good listening?**

PROBLEMS OF POOR LISTENING

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017. Explain the problems of poor listening.

Despite the significance of listening in our lives, few of us listen well. Research shows that the average person retains only a portion of what he hears, perhaps about 50 percent of message content immediately after the speech. And this retention drops quickly after that. All of us, as listeners, have heard speeches about which we remembered almost nothing only a few hours afterward. Certainly such poor recall suggests equally poor comprehension, appreciation, and analysis.

One reason for poor listening is the fact that most people understand so little about the process itself. Our educational system has neglected the subject of listening almost entirely, and even those who have studied the process closely express uncertainty about some of its more complex aspects.

Another reason we know so little about listening is that it has only recently been recognized as a skill. In fact, many people still view the process as merely physiological, somewhat beyond our conscious control. This confusion has resulted, in part, from a misunderstanding of the role that hearing plays in the listening process. While the terms *listening* and *hearing* are often used synonymously, they in fact refer to quite different processes. *Hearing* refers to *the reception of aural stimuli (sounds)* and, as such, forms the basis of our ability to listen. The term listening refers to *the total process of receiving, interpreting, analyzing, and retaining data.*

Although listening is based in part on hearing, we now recognize that listening involves more than reception of audible data, and often includes visual stimuli as well.

Furthermore, there is little direct correlation between a person's hearing acuity and the ability to listen. One indication of the distinction between the two concepts is seen in the fact that it is very difficult to "turn off" our hearing and tune out loud, abrasive noises, yet we find little difficulty in "tuning out" a speaker whom we consider boring, uninformed, or irrelevant.

Ignorance of the listening process has resulted in at least two faulty assumptions. First, people have assumed that listening was largely out of their control, that it could not be taught or improved, and that they were therefore destined to a lifetime of poor listening. "I just can't seem to listen" (instead of "I just won't listen") has become an acceptable excuse to many people.

Second, a common belief is that since we all have essentially the same hearing apparatus, we all receive basically the same message. Actually, since listening is largely a psychological process, such individual factors as experience, education, beliefs, attitudes, values, and interests may so affect our listening that the message one person gets may be entirely different from the message received by the individual sitting next to him. As listeners, we should recognize what factors influence our listening so that we do not allow them to interfere with accurate message reception.

Exercises (017):

1. **Explain the reasons for poor listening.**

2. **Discuss the assumptions that have been made about listening.**

SUGGESTIONS FOR IMPROVING LISTENING ABILITY

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018. Discuss suggestions to help improve the ability to listen.

Fortunately, in spite of our individual differences, there are some things we can do about our listening ability. Educators have found that a number of factors bear directly upon our ability to listen. The following suggestions may help improve our listening efficiency.

1. *Be physically and mentally prepared.* Listening not only requires effort, but it demands a great deal of energy. It is not unusual for people who experience intense listening to become exhausted. Because listening is hard work, there is no way we can expect to listen effectively if we are physically or mentally unprepared. We cannot listen well if we are fatigued, hungry, or otherwise physically uncomfortable. Good listening is characterized by a general physical and mental alertness, including such physiological changes as a quicker pulse and a slight rise in the body temperature.

Because of the importance of the listener's role in effective communication, we cannot expect to lean back in our chairs and be "filled up" with knowledge without contributing our own effort. In order to be mentally prepared, it is sometimes necessary for the listener to bring to the event certain knowledge and information. One way to do this is to engage in advance reading for suitable background on a subject. This is particularly useful if we plan to listen to a message in which the speaker assumes that we have certain information, or in situations where time is limited and a subject cannot be explored thoroughly. Quite often, listening to technical or unfamiliar material demands such preparation.

A second way to prepare for a listening situation is to be ready to take notes if necessary. Often people forget to consider the possibility that notes may be useful and find themselves wishing they had brought appropriate materials. Effective note-taking will be discussed in more detail below.

2. *Set listening goals.* One characteristic of many poor listeners is the tendency to confront listening situations without considering either what they hope to gain or how they might use the information they hear. A key to effective listening is determining general and specific goals for each listening situation. A general listening goal would be to decide whether you are listening for *pleasure*, *comprehension*, or *evaluation*. These three general goals can be viewed on a continuum, with listening for pleasure making the least demands on the listener and listening for evaluation requiring the most effort. Each of these listening situations can require different attitudes and skills.

Second, you might wish to determine specific goals (i.e., "I want to understand the causes of the French and Indian War," "I want to decide whether or not to support the upcoming referendum," or "I'd like to get really involved in this play, without becoming bored or distracted.") By consciously establishing goals, we are more aware of where to focus our attention, and by so doing, we are more likely to find our listening experience productive.

3. *Motivate yourself to listen.* Earlier we argued that speakers cannot command an audience's attention. While good speakers work to create interest and hold attention, they cannot force someone to listen if the person really prefers to daydream. Therefore, listening ultimately becomes an exercise in self-motivation by each receiver.

Good listeners develop strategies for motivating their own listening behavior. One of the most frequent complaints of ineffective listeners is that they can't make themselves concentrate, and concentration is the key to good listening. You may have had the experience of telling yourself to "listen better" or to "try harder to listen," only to find yourself focusing on your own behavior, missing the message almost entirely. Good listening requires focusing on the message, and the ability

to concentrate usually begins with finding areas of interest or importance to you.

Good listeners are very selfish and very practical in that they aggressively seek information which interests them and which might be of later use. Bad listeners often conclude that a topic is boring or irrelevant after only a few sentences, or perhaps even before the speaker has begun. Good listeners may have the same initial reaction; however, they recognize the importance of productive use of time. By making the most of the situation, they generate their own interest and attention.

Another way to motivate listening is to reward yourself. Effective speakers often reward their audiences for listening—either subtly, by making the experience pleasant, or more obviously, by thanking the audience for their attention and responsiveness. Listeners can develop their own systems of rewards for times they have listened well.

4. *Focus on the message content and not the speaker's delivery.* One of the biggest listening traps is becoming distracted by the speaker's delivery. Many college students, for instance, have admitted to becoming so engrossed in counting the number of "uh's" or paces made by an instructor that they totally missed the content of the lecture. Other people have rationalized their way out of listening because of a speaker's monotone or some other unpleasant delivery characteristic. While good listeners may also identify delivery weaknesses in a speaker, they do not allow themselves to concentrate on them nor do they allow such factors to become an excuse for daydreaming.

5. *Avoid emotional reactions.* As noted earlier, psychological factors affect listening. Beliefs, attitudes, and values provide filters that can distort or inhibit message reception. Most of us have certain words, phrases or subjects which trigger our immediate emotional reactions. While a list of such emotional triggers might be endless, a few examples mentioned frequently are abortion, the defense budget, inflation, welfare, Affirmative Action, public utilities, and Richard Nixon. Whenever we hear one of our own set of trigger words, it is difficult to listen objectively; however, it is especially hard to listen when the speaker's remarks contradict our own opinions and feelings. In some cases, we may "tune out" the speaker. This selective listening results in incomplete and distorted information.

A common tendency among "overstimulated," emotionally charged listeners is to prepare a mental rebuttal, formulating argumentative responses or questions to be offered when the speaker finishes. While it seems that we are listening critically when we engage in mental rebuttal, actually just the opposite occurs, because we cannot objectively comprehend what the speaker is saying and at the same time develop arguments against his message. What generally happens is that we become so absorbed in preparing our own "speech" that we miss the speaker's message. In addition to losing valuable information, many people have discovered the embarrassment of having their inattention exposed publicly by asking a question or making a response to a matter which was already addressed in the speech.

A good strategy to avoid overstimulation is to assess the words and concepts which tend to evoke an emotional response. By focusing initially on comprehension (instead of evaluation), you can objectively note arguments and supporting material, ensuring a clearer understanding of the speaker's position. *After* comprehension and analysis are complete, *then* appropriate evaluation and response can occur.

6. *Look for the main ideas.* Most of us have difficulty discerning the main ideas in speeches. And there is frequently little agreement between listeners about which points appear to be most significant. Perhaps this problem stems from our preoccupation with facts in the United States. Most of us have been taught from an early age to "get the facts" or "look for the facts." Wiser advice is to "get the main idea" or "look for major points." What is wrong with looking for the facts? Facts by themselves have little or no use, but when coupled with ideas or principles, they take on value. Furthermore, it is difficult for most of us to remember facts in isolation. Ideas are the substance that give facts "sense." When we go about trying to memorize facts in isolation, we take on the added burden of trying to make sense out of them, and the result is that we are likely to fall quickly behind the speaker, losing valuable information and important ideas in the process.

Good listeners can find main ideas. They consciously remind themselves to focus on principles, asking questions like "What is the speaker getting at?" or "What principle does this information support?" Fortunately, some speakers give us clues to indicate the introduction of a major idea. Verbally, they often use such phrases as "First . . . ; second . . ." or "The point is . . ." or "We can conclude . . ." Main ideas are often previewed at the beginning of a speech and summarized at the end, so a careful listener watches for these clues. Speakers also employ a variety of nonverbal methods to suggest emphasis of an important idea. Vocally, a speaker may use pauses or a change in rate or volume to signal a major point. Other nonverbal clues include changes in body movement, gestures, or facial expression.

7. *Use note-taking to advantage.* Note-taking is often a useful tool for effective listening, though inappropriate note-taking can do more harm than taking no notes at all. While most of us need to take some notes in order to retain information, it is important that we use them to supplement good listening and not allow them to interfere with the listening process.

Many people get carried away trying to develop thorough, well-organized notes, often within a carefully structured outline format. Problems arise when the speaker does not follow an easily identifiable organizational pattern. Our experience has been that no more than one in three speakers carefully organize their material in such a pattern. If we try to reorganize their speech to fit our pattern, we sacrifice attention to the

message. Effective note-taking means adapting to the speaker, not attempting to adapt the speaker to our style.

A second tendency among note-takers is to try to put too much down on paper. This is particularly true of people who get submerged in the search for facts. A strategy to avoid this trap is to listen for a few minutes, get a sense of the speaker's direction, and then begin note-taking. In many instances, fewer notes that are more concise and direct are more profitable than lengthy or detailed notes.

8. *Control the listening environment.* In most listening situations there are many potential distractions that can interfere with concentration. Such obstacles include noise coming through an open window, people engaged in side conversations, poor lighting or acoustics, or a speaker who does not adjust his volume to the size of the room.

Often the problem can be solved by closing a window, asking the speaker to talk louder, or moving to a better seat. Sometimes it is necessary to concentrate harder. Effective listeners seem to recognize that while distractions are a normal obstacle, the listener should not permit them to become an excuse for poor listening. Furthermore, speakers often are not as aware of distractions. While a speaker might be very conscious of a loud siren outside the building, he is not as likely to notice noisy chatter in the back of a large room. For example, a speaker once addressed a group in a fairly large room that had no public address system. He asked if everyone could hear him clearly. Most people, including those in the back of the room, responded affirmatively. The speaker said, "If at any time you cannot hear me, wave a hand or speak up and I'll try to talk louder." At the end of his lecture, someone came up to him and said, "After the first few minutes, the noise in the hallway got so loud I couldn't hear a word you said." Our question is, whose fault was that? Certainly the responsibility of controlling the listening environment lies partly with the listener.

9. *Challenge your listening skills.* Many *poor* listeners are *inexperienced* listeners. They have generally avoided situations that involve extended listening time or difficult, unfamiliar material. Just as improvement in any sport requires not only practice but the confrontation of new and increasingly challenging situations, so does development of listening skill. If we confine our listening habits to half-hour situation comedies on television which are frequently interrupted by commercials, we are not likely to have the stamina to manage a 45- to 60-minute speech on a difficult, technical topic. Yet most of us must confront situations that require extended concentration. The development of listening skills requires stretching our powers of concentration and exercising the mind; it cannot be accomplished unless we are willing to seek out more challenging material.

10. *Ask questions and check perceptions.* If time is provided for a question or feedback session, take advantage of it. Too often that time is viewed merely as a chance for audience members to react with their opinions. Time can usually be better spent by probing for additional information or by seeking clarification. For instance, one might ask "Where did you get the statistics on rural growth?" or "How do you stand on the seniority system in Congress?" or "What is the basis for your conclusion that violent crime is decreasing?" These questions may take the form of a paraphrase of what the listener thinks he heard. For instance, "Do I understand you to oppose all forms of sex education in the public schools?" "Did you claim that there is irrefutable evidence to link crime with televised violence?"

11. *Capitalize on thought speed.* Nichols (1957) maintains that if we could measure thought in words per minute, we would find that people think at a rate of approximately 400 words per minute. Other estimates range as high as 750 words per minute. Yet the average rate of speech in this country is only about 125 words per minute. The impact of this differential bears directly upon the problem of effective listening. Since we can *think* four or more times faster than the speaker can *talk*, and since our mind does not "slow down" to adjust to the speaker's rate, we find other ways to use our surplus word-processing capacity. Daydreaming is perhaps the most popular pastime. Most of us are aware that it is quite easy to "check out" of a speech for a second or two, allow the mind to wander, and jump back in, picking up almost where we left off. The thought speed-speech speed differential makes that possible. Two problems arise from this activity, however. First, it is very difficult for our minds to handle effectively two entirely unrelated subjects for any length of time. We cannot do justice to both topics. Second, because daydreaming is much easier for us than listening, it almost invariably wins out. The farther we fall behind the speaker because of our daydreaming, the more difficult it becomes to listen, and eventually daydreaming takes over completely.

In spite of its pitfalls, our thought speed need not be a handicap. In fact, if used properly, it can become the listener's greatest asset. The most effective strategy is to *use extra thought capacity in ways which help rather than hinder the listening process.* Below are some specific strategies that will improve listening through the efficient use of thought speed.

Listen for Comprehension

1. *Try to determine the speaker's purpose and direction.* What is the speaker's goal; what does he hope to accomplish? Where is he going with the point that he's making? What ground will be covered next?
2. *Recapitulate.* Mentally summarize the main points which have been made. How are the points related?
3. *Listen between the lines to get the speaker's total meaning.* Effective listening involves more than understanding individual words. We listen between the lines when we search for figurative as well as literal meanings, when we are aware of the speaker's use of irony, humor, or other creative devices. We also listen between the lines by noting nonverbal

communication. The speaker's voice, posture, movement, and facial expression can, as we have noted, modify his verbal message. Thus, in using thought speed we consider things we see as well as hear.

4. *Note the speaker's supporting materials.* Does the speaker use evidence to support main points? If so, what kind?
5. *Relate the information to your own experience and point of view.* How does this new information apply to you? In what ways can you use it? Does it confirm or contradict your own experience and attitudes?
6. *Prepare some questions which you would like answered.* This list may include probes and paraphrases for the speaker to answer, but it may also include questions you will wish to check into later on your own.

Listen for Evaluation

1. *Identify the speaker's general and specific goals.* Is the speech designed primarily to entertain, inform, or persuade? What specific response is intended from the audience?
2. *What are the main ideas expressed?* Do they seem to make sense individually? Do they seem to follow some logical sequence? As a unit, do they seem to provide a complete picture? Are there any gaps or hidden assumptions?
3. *How are the main ideas supported?* What kinds of support materials, if any, are used? Are the quote sources qualified and unbiased? Is the evidence verifiable? Does the evidence seem to be complete? Does it seem to support the conclusion the speaker claims? Is there variety in terms of the methods of support and the sources cited?
4. *What methods are used for motivation?* What values, attitudes, and needs are appealed to? Does the speaker as a person appear to be credible, both in terms of expertise and character?
5. *How does the speaker use language?* Is he clear, concise, imaginative? Is the choice of words appropriate to the audience in terms of understanding and taste?
6. *How does the speaker communicate nonverbally?* How effective is the use of movement, voice, facial expression, appearance, and visual aids for communication? In general, does delivery enhance or detract from the message presentation?
7. *Does the speaker use creativity to make his presentation more worthwhile?* What methods, if any, does the speaker use to gain and hold audience attention? Does the overall presentation suggest an imaginative approach to the structure of the speech, including the introduction and conclusion? Are creative devices used to stimulate the audience's imagination?
8. *What is the speaker's apparent attitude toward the audience?* Does he appear to be involved, congenial, adaptable? Is he responsive to feedback? How are questions and audience interaction handled?
9. *What is your general reaction to the communication event?* Do you feel basically positive, negative, or uncertain? How does this compare in terms of quality to similar events you have experienced?
10. *How does this event relate to the larger environment?* That is, what is the relevance or impact of the speech to other activities and issues in our lives?

Exercises (018):

1. Discuss the difficulties experienced when listening.

2. Explain the 11 suggestions aimed at improving our listening ability.

LISTENING BEHAVIOR AFFECTS THE SPEAKER

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019. Explain how listening behavior affects the speaker's behavior.

In conclusion, perhaps the most important single fact to remember about listening to a public speech is that *listening behavior affects the speaker's behavior.* It helps determine the degree to which audience members ask questions. It helps determine the kinds of nonverbal behaviors that they exhibit and that the speaker may perceive. And it helps determine the speaker's response to the feedback.

For example, in this chapter's opening example of the college lecturer, Marilyn Hazelton, how enthusiastic and committed to effective communication could she remain, semester after semester, if the poor listening behavior of her students remained the same? Could student listening habits be one reason why some teachers stop trying, why they just "go through the motions" because they are not being rewarded with positive student feedback? If so, then the result may be a vicious cycle. The teacher's lack of enthusiasm is perceived by students, who assume that the message is unimportant. They listen even more poorly than before, and the teacher responds with even less effort. The reciprocal effects that senders and receivers have on each other, a concept we have stressed throughout this book, suggest the responsibility that each listener must share when unproductive communication occurs.

On the other hand, consider what good listeners can do to improve a speech. Suppose they are determined to listen well. They ask questions that demonstrate their having comprehended the major ideas. Their eye contact is directly on the speaker, they nod attentively and jot down things the speaker says. The speaker perceives their behavior and becomes more enthusiastic and committed to do well. And the next time he gives a speech to this

audience, he may be more inclined to think, "This is an important group of people. They are interested in what I have to say. I don't want to let them down, so I'll prepare especially well for this next speech." If he does well, or if he improves, the listeners may notice and continue to respond favorably. Thus, a cycle of positively reinforcing behaviors between speaker and listeners improves the productivity of each successive speech. In short, good listening rewards and stimulates good public speaking.

Similarly, good public speaking can reward good listening. Throughout this book we have provided suggestions to speakers that indirectly improve listening. For example, our suggestions for clear speech organization and for improving language and clarifying materials in informative speaking also facilitate a receiver's listening potential. Here we offer a final suggestion. *When good listening occurs, reinforce it directly.* The following comments, if sincerely felt and presented, provide such reinforcement:

> "Thank you for giving me your attention. Whether or not you agree with me, you certainly were the type of audience I enjoy speaking to."
>
> "The results of the exam tell me that you were listening carefully to the lectures. Good work!"
>
> "That's a very good question. It relates directly to the central point I was making."
>
> "Your constructive suggestions have been very helpful to me. I'm grateful that you were listening critically to my speech."

Exercises (019):

1. **How can listening behavior help to improve a speech?**
2. **Explain adverse effects of poor listening on the speaker.**
3. **How can speakers reward good listening behavior?**

SUMMARY

Listening is something we all do, but few of us do well. Its importance in public communication is fourfold. First, good listening helps the receiver, both in terms of responding to the speaker and in terms of using the information in practical ways. Second, good listening helps the speaker better achieve the speech purpose and adapt to receiver needs. Third, good listening has a social benefit, because people will make better decisions if they have received information accurately and critically. Finally, it improves public speaking skills, as receivers who listen well not only have more resources for their own speeches but also are more aware of good and bad speech habits.

Hearing is the reception of aural stimuli, but *listening* is the whole process of receiving, interpreting, analyzing, and retaining information. We may hear without listening. People vary significantly in their motivation and ability to listen well.

Suggestions for improving listening include: being physically and mentally prepared; setting listening goals; motivating yourself to listen; focusing on speech content rather than delivery; avoiding emotional reactions; looking for the main ideas; using note-taking to advantage; controlling the listening environment; challenging your listening skills; asking questions and checking perceptions; and capitalizing on thought speed.

In terms of thought speed, we know that people think more rapidly than a speaker talks, meaning that any listener has excess mental capacity to think about other things. This excess thought speed, rather than being wasted in daydreaming, should be put to use both to improve comprehension and to better evaluate the speeches we hear.

Speakers and listeners should realize that their behaviors are reciprocal—they affect each other. Thus, positive feedback from listeners can improve public speaking, and positive reinforcement by speakers of good listening behavior will improve receivers' future willingness to listen well.

Lesson 4

THE WRITING PROCESS

Lesson Objective: Comprehend the steps in preparing to write and the process of writing a first draft.

Introduction: Writing is basic to almost everything we do in the Air Force. Consequently, the quality of your writing has a lot to do with how well you perform your job. You must be able to express ideas, plans, and procedures clearly and concisely.

If your writing isn't clear, the readers won't know what you want them to do. If you're wordy, they waste valuable time getting your message. If your choice of language is unusual, too mechanical or formal, they lose interest. And, if your thinking is illogical or biased, they probably won't accept the solutions. You can readily see how poor writing can hinder the efficiency of Air Force operations.

Yet, despite marked improvement in recent years, much Air Force writing is still verbose, stilted, and hard to read. Many writers are indirect and wordy. Many of us expect our readers to do most of the work. We pack too many words into sentences, and, worse yet, we often force our readers to hold a number of important ideas together in their minds until the end of the sentence to get our complete meaning. This is unfair to the busy reader.

In short, much of our writing fails to get its message across quickly and easily because the writer forgets his responsibility to the reader. The reader doesn't get meaning; instead, he gets *gobbledygook*. This catchword means that the writer uses:

- Many words to say what could be said just as well in a few.
- Unfamiliar words.
- Words of three or four syllables when simpler words would give the same idea.
- Military jargon and trite, overworked phrases.
- Long and involved sentences.
- Foreign expressions.
- Jumbled, unrelated illogical ideas.

Reprinted from AFP 13-2, *Guide for Air Force Writing*. Washington, DC: Department of the Air Force, 1 November 1973, pp. 1-5.

This kind of writing is inexcusable. It wastes manhours, money, and material—and it still doesn't get the job done. In fact, it seriously interferes with our mission.

What, then, can you do to write more effectively—clear, simple, direct, and understandable writing? This lesson deals with preparing to write and how to write a first draft. Reading 1, "Organize Your Thinking," Reading 2, "Getting the Information You Need," and Reading 3, "Organize Your Material," provide you with the instruction you need to understand the steps in preparing to write. Reading 4, "Write a First Draft," and Reading 5, "Edit, Rewrite, and Polish Your Writing," provide instruction on how to write your first draft.

Two bits of advice before we get into the "meat" of this lesson.

First, remember that speaking, not writing, is the natural act for all of us. Writing is hard work for almost everyone, including the creative artist. The only difference between the good writer and the poor one, apart from native ability or learned talent, is that *the good writer approaches the task systematically.* Effective writers:

a. Do not begin to write until they have all the facts and information they need.
b. Name their topic.
c. Never use two words when one will do.
d. Revise and polish as necessary to produce a smooth final copy.

As the old saying goes—hard writing makes easy reading.

Second, remember that *writing requires practice,* just as golf and tennis do. No one expects to learn a skill simply by reading a book. Practice is equally important if you wish to improve your game. Similarly, you can improve your ability to write effectively with guidance and practice. You should consider this and the following lessons not as a substitute *for* but as a guide *to* better practice.

ORGANIZE YOUR THINKING

AS STATED in the introduction to this lesson, the writer must convey information to the reader quickly and as clearly as possible. But to write clearly, a writer must first *think* clearly. Think through what you are going to write before you put anything on paper. In other words, fix your ideas in your own mind before you try to communicate them to others. After all, you can't hope to communicate your ideas clearly to someone else if they are not clear to you, the writer.

One of the best ways to think through what you are going to write about is to follow a step-by-step plan. A logical plan helps to ensure that you consider all the relevant aspects of the subject or problem you are going to write about. This reading tells how to set up and follow such a plan.

CLARIFY YOUR PURPOSE

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020. Identify how to determine the purpose of communication.

Every written communication should have a worthwhile purpose, or remain unwritten. A purpose is worthwhile when it is important enough to offset the substantial costs of preparing, sending, reading, acting on, and filing a written communication. But a purpose is more than justification—it is also the big idea on which the writing is based, the basis for the whole written communication. The writer must determine at the outset exactly what that purpose is and then clarify in his own mind his ideas about it before starting to write.

The purpose of a written communication actually consists of two elements: the general purpose and the specific objective. Some writers find it helpful to consider each of these elements separately, first the purpose and then the objective.

Determine the general purpose. Whatever the subject, Air Force writing has one of three general purposes: to direct, to inform (or ask questions), or to persuade. All three of these purposes are concerned with who, what, when, and how, but the emphasis will differ according to the type of written communication involved. For example, a directive usually emphasizes *what* is to be done, informative writing *how* to do something, and persuasive writing *why* something should be done.

The general purposes frequently overlap, as when informative writing is made more understandable by an explanation of *why*, but the writer must know which is his main general purpose and emphasize it. For example, a writer seeking approval of a new procedure probably would want to describe *how* it works, but he also would want to emphasize *why* it should be used. In any case, the writer must decide what his or her general purpose in writing is, and if there is more than one, how much emphasis to give each.

Determine the specific objective. Once you have determined your general purpose you should ask yourself, "What is my specific objective?" The answer may be obvious or may require considerable thought. If you find it hard to define your objective, take warning: what is not clear to you cannot be clear to anyone else.

You may find it helpful to write out a statement of your objective. Make it concise and say exactly what you want to do. Statements such as "Request for funds" or "Instruction in sanitation" are too general and would not help very much to clarify your purpose. On the other hand, statements such as "My objective is to get $25,000 to build a man-proof fence around the communications center" or "My objective is to instruct personnel in sanitary methods of handling and storing perishable foods," because they are more specific, would better help you to clarify your purpose for writing.

Reprinted from AFP 13-2, *Guide for Air Force Writing*. Washington, DC: Department of the Air Force, 1 November 1973, pp. 59-64.

Exercises (020):

1. Explain the elements of written communication.
2. Identify the three general purposes of Air Force writing.
3. Explain why it is important to determine the specific objective.

ANALYZE YOUR READER

021. Explain the need for analyzing the reader.

Once you have clarified your purpose, ask yourself, "Who must read and understand this?" The answer affects the ideas as well as the words you use and must be kept in mind throughout the preparation and writing phases. Your writing effectiveness depends to a great extent on how accurately you analyze your potential reader. Probably the best way to do this is to ask several questions—for example:

Who will read it? Since your message is intended for a reader, know who the reader is. The answer to this question strongly effects everything you do from now on. For example, even if the material to be presented were similar, you normally would not express yourself in the same way when writing to a staff officer in the Pentagon as you would to a person working on the flight line.

What is the reader's educational background? Is he or she a high school graduate? A college graduate? Somewhere in between the two?

What is the scope of experience in this area? Has the reader a general background knowledge of the subject, or is he or she a specialist in this field? Will you have to write five pages of detailed support for your ideas to get them across, or can you write a one-page brief to support your paper?

What reaction do you want the reader to have? This may vary considerably. Sometimes you just want your reader to know about something. At other times you may want to elicit active support for one of your projects. Or you may want a reaction that is somewhere between these two. Whatever the desired reaction, determine it at this point.

Are any other factors involved? Does your reader have any preconceived ideas or prejudices that will affect his or her reaction to what you write? Is the reader apt to like or dislike what you have to tell him or her? Will he or she be receptive to what you have to say?

Exercises (021):

1. Why is it important to analyze the reader before starting to write?
2. How may a reader's educational level and experience affect the writer?

DEFINE THE LIMITS OF YOUR SUBJECT

022. Describe the steps to be followed in specifically identifying the subject.

After you have analyzed who your reader will be, you are ready to define the limits of the subject. Many writers neglect to do this, or, if they do, they forget to keep within the limits they establish. As a result, much of their writing is irrelevant, and their message is lost or hidden in needless words and pages.

The limits you place around your subject should depend on two things—your purpose in writing and the needs of your reader. To decide what your subject limits should be, first think about your general purpose. Is it to direct, inform (or ask questions), or persuade—or is it a combination of any of those? Next, remind yourself of your specific objective. Now, think about your reader again: educational background, scope of experience in the area, and the factors influencing the reaction you want to bring about.

If you carefully analyze all these items and keep them firmly in mind as you go to the next step in preparing to write, you should have little difficulty in covering your subject both adequately and effectively. You will automatically limit your writing to that material which is necessary to achieve your purpose and objective.

WRITE A STATEMENT OF PURPOSE

Write out an informal statement that briefly states your purpose, identifies your reader, and limits the subject. This is your statement of purpose. If possible, compress it into a single sentence. It is more helpful to you if it also identifies the main points to be covered and suggests the organization that will be followed. Such detail is not always necessary or desirable, but, whatever the subject, wise writers state their purpose as completely and specifically as possible, including as much detail as will be helpful when the writing begins.

The statement of purpose can be compared to the topic sentence of a paragraph. Just as the topic sentence governs and controls every sentence in the paragraph, the statement of purpose governs and controls every paragraph in a larger writing assignment.

When you have written it down, keep it in front of you during the remainder of the organizing process. You may have to revise your statement of purpose as you progress but at least you have a starting point.

LIST SPECIFIC IDEAS

Now you are ready to "brainstorm." List as many ideas as possible regarding the subject.

Next, go back and judge, criticize, eliminate, or combine those ideas. When you have done that, choose the ideas that best support your specific purpose.

You are now ready to get all the facts and other information you need. The next reading suggests ways to do that. But, first, use the following checklist to see if you have organized your thinking sufficiently to proceed to the next step.

Checklist

HAVE YOU ORGANIZED YOUR THINKING ADEQUATELY?

1. Have you clarified your purpose for writing in your own mind?
   a. What is your general purpose?
   b. What is your specific objective?
2. Have you identified and analyzed who your potential readers will be?
   a. What is their educational background?
   b. What is their scope of experience in the area?
   c. What reaction do you want them to have?
   d. Have you considered all other factors that might affect their reaction and how you should write what you have to say?
3. Have you defined the limits of the subject you will write about?
   a. Is the subject limited to your general purpose and specific objective?
   b. Is it limited to what the readers need to know?
4. Have you written out a brief statement of your purpose? Does it:
   a. Specify your purpose?
   b. Identify your readers?
   c. Indicate the limits of the subject to be covered?
   d. Identify the main points to be covered?
   e. Suggest the organization that will be followed?
5. Have you listed specific ideas to use in your writing and then chosen the best ones to support your specific purpose?

Exercises (022):

1. Explain the procedure to be followed when limiting the subject on which you have decided to write.

2. Explain how brainstorming can aid a writer in selecting ideas that support the purpose of the writing.

Reading 2

GETTING THE INFORMATION YOU NEED

THE AMOUNT of research you have to do depends primarily on the scope and complexity of your writing assignment. For a short letter you may have to do nothing more than check the correspondence file in the office to see what has already been written on the subject. A more complex writing assignment—a report, a staff study, a regulation, or a manual, for example—probably will involve more strenuous research. This chapter tells how to plan your research and how to record the information you obtain.

HOW TO GET STARTED

Before you begin any research, remind yourself of the purpose of your study and keep it fixed clearly in your mind. In doing this, you define for yourself the limits of your subject and get some ideas about a plan of approach. Even after defining your problem, however, you should not plunge immediately into research.

Research your own ideas. Remember that a writer encourages originality when he searches among his own thoughts before researching the ideas of others. This also gives direction to your research by identifying subject areas in which you need more information.

Plan your approach. Next, tentatively plan your approach for any further research that may be necessary. Recall what you already know about the subject. Use the list of specific ideas on the subject that your plan outlines. Write down, as major points, ideas which you feel will give a workable solution to your problem. Under each major point, list the minor points needed for support and development. This tentative outline helps you recognize and catalog significant facts and ideas. During the research phase, you probably will change and review it many times. Don't worry about that. It is merely a guide to show you specific areas needing investigation.

WHERE TO FIND INFORMATION

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023. Identify the sources of information available for gathering valid information to be used in your writing.

Many sources of information are available to the Air Force writer. This section discusses the ones most frequently used.

In your own office. Before considering any other source of information, you should check research materials available in your office. Office files (both current and old), staff study reports, Air Force publications, and official histories are possible sources.

After you have checked these, you may need to check the library for further information.

In the library. Any library is useful if you understand the system or arrangement and the indexes that will help you locate what you need. Once you feel at home in the library, you should (1) survey the available material; (2) study in detail important references, summarize and write down the data that you think you will need; and (3) read important passages for details. You will find more detailed suggestions for collecting information in the library in the following sections.

General references. To obtain a quick overview of your subject, you often will find an encyclopedia most useful. It helps you survey the whole field. Then you can get down to details. Nearly every field of knowledge has its own encyclopedia and dictionaries. If you are not already familiar with general references in your field, consult the library reference section.

Reprinted from AFP 13-2, *Guide for Air Force Writing*. Washington, DC: Department of the Air Force, 1 November 1973, pp. 25-28.

The card catalog. After you have an overview of your subject and have limited its scope, you may want to survey the card catalog systematically. The card catalog is an alphabetical listing of materials in the library with their location or "call" numbers. You can find materials that the library has on a subject by looking for them alphabetically under (1) an author's name, (2) a publication title, or (3) the subject.

Publications indexes. In addition to military publications indexes, you may wish to consult magazine and newspaper indexes to find current articles on your subject. Each profession has an index to its journals, such as the *Education Index*. There also are indexes covering magazines of general interest, such as the *Reader's Guide*. Periodical indexes usually are arranged alphabetically by subject, with a list of titles of articles followed by the name of the magazine, author, volume, pages, and date.

Other sources of information. You may find valuable data in lectures (or the published version of lectures), or you may decide to use a questionnaire for personal interviews to get facts and ideas.

Lectures. There are several things you should be careful about when you use lecture notes or the printed versions of lectures as sources of information. For example, if you attend a lecture and take notes, record the speaker's statements accurately. Don't put meaning into words that was not intended. Don't quote ideas out of context. And, guard against quoting a lecturer as an authority for a statement that was quoted from someone else.

Questionnaires. If you intend to conduct a survey, plan the whole undertaking carefully before you send the questionnaire. Your questionnaire should be brief and worded clearly so that it does not take too long to fill out. When you send it, explain the reason for the study to dispel any suspicion about your motives. If you think anyone will hold back information, ask that the questionnaire be returned without a name. If, on the other hand, you think it is necessary to identify each one, have the name and address typed at the top of the sheet before sending it out. Offering to send a copy of the completed study may help to arouse interest in your project.

Make your questionnaire as objective as possible. If you have in mind the results you hope to obtain, you are apt to word the questions so that you influence the person receiving the questionnaire. So, ask specific questions but do not slant or "load" them.

Interviews. A survey may be worked out on the basis of a series of interviews in place of questionnaires. Generally, you get more information from personal contact than from a questionnaire.

Carefully plan your interview ahead of time. Decide what questions you need answered. During the interview, be a tactful listener and questioner. You may discover angles to your problem that you never thought of before. If you see that taking notes bothers the person you are interviewing, put your pencil down and concentrate on remembering. You can write down what you need as soon as you complete the interview.

It is probably more difficult to be objective in an interview than in a questionnaire. It is very easy to influence a person to answer your questions in a certain way by how you phrase your questions and even by your tone or inflection or facial expression. But if you do influence the person you are interviewing to answer your questions in such a way, his statements will not provide the kind of unbiased information you need.

Check your data's validity. Two of the most important types of data are *witness reports* (including your own observations) and the *opinions of authorities* who are specialists in their fields. You probably will use both types in your writing, and you should check the validity of your data as you find it.

Witness reports. Witness reports are made by an observer. Anyone can be an observer or witness, and anyone can expand his or her own observation by drawing on the experience of other people through conversation and reading. The tests of a good witness are whether he or she is reliable and unprejudiced and was in a position to know the facts.

Opinions of authorities. Authorities are valuable if they are experts in their field, are not prejudiced, and are current. What makes a person an authority is the recognition he or she has attained in his or her particular field. The opinions of an authority are based on data and arrived at by reasoning. When you use the opinions of an authority in your writing, it is best to give not only the authority's judgment but also an indication of his or her reasoning. For example: Ask yourself these questions: "Why did the authority choose a certain course of action rather than opposing courses of action?" "What was the basis for the authority's decision?" "Are the factors which the authority originally considered in arriving at this decision still valid?"

The important point to remember at this time is that the validity of your reasoning when you begin to write depends to a great extent on the validity of the data you obtain from your research. So check it carefully *as you find it* to be sure that it really is valid.

Collect the information you need. A good part of your training in research consists of learning how to handle references. You will come to recognize the value of a reference by its author, its timeliness (date of publication), and the soundness of some of the author's generalizations. As you gather more information, you become more and more of a critic.

Learn to skim. Learning how to skim a book or article to decide its usefulness is important. If you believe a reference has value for you, survey it quickly to be certain. Look over the table of contents. Then check to see how recent it is and why the author is qualified to write on the subject. Use the index and headings freely. Skim passages that may be important for you. It is not

necessary for you to read a book from cover to cover to extract what you need.

Interpret fairly. Be sure to interpret each author correctly. This is important. When you summarize information, do not read your own ideas into what an author says. If you want to add some comments of your own, be sure that you put them in brackets or otherwise indicate that the ideas are yours.

Note your own ideas. As you study a reference, you may suddenly think of an idea that is not covered by anything the author says. Use a separate note card for this idea. Put the subject in the upper left corner, as you do for your other notes. Then identify it as "my idea" or mark it in some similar way. Unless you write down an idea when it occurs, you run the risk of losing it completely.

Use discretion. At first you may wish to note many items. You may be a little vague about your facts but, as you progress, you should come into command of your subject. Do not spend hours copying a lot of unrelated material. Do not note too many items word for word. You are apt to exercise better judgment if you digest the information and put in your own words.

Trace facts to their source. One of the cardinal principles of good research is to trace facts back to the first source so that no errors creep in. The factor of human error is important to you. If you are basing your solution rather heavily on a certain report, for example, it would be well for you to check to see that you are using the original version of that report and not someone else's interpretation of it.

Keep an open mind. At this point in your work it is particular important to stay objective and keep an open mind. Don't fall into the common trap of proving preconceived notions by your research. Be ready to change your mind if the facts warrant your doing so.

Exercises (023):

1. **List some possible sources of information.**
2. **Why is it necessary to validate the data received from your source?**
3. **Why should preconceived notions about the subject be avoided when gathering information?**

HOW TO COMPLETE YOUR RESEARCH

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024. Summarize the steps to follow when completing your research.

No one can tell you when you are ready to conclude your research. You must decide yourself, and it requires good judgment.

A good general rule to follow, when possible, is this: Don't start to limit the extent of your research until after you have substantial knowledge of your subject, and don't start to think about ending your research until you know as much about your topic as you need to know. In other words, get all the facts and information you need and record all the notes you need. Become an authority on your subject; no amount of writing and rewriting can substitute for knowing as much as you can about what you are writing.

The point is this, and it's one many beginning writers usually ignore: it is impossible to write well about anything without an adequate knowledge of the subject. All the advice in the rest of this article is worthless if you have not done enough research. Once you do know enough about a topic, your writing assignment seems to write itself.

Survey your findings periodically. As you gather information, periodically survey your findings and mentally summarize the results of your research. This reminds you of what you have already found and gives you an idea of what and how much information you still need.

Examine your findings critically. When you feel the information you have collected is adequate for your needs, you should evaluate your findings. Consider not only the evidence that you have, but also the evidence that you do *not* have. In other words, round out your generalizations by considering negative aspects of the case as well as the positive ones. Look on your findings with humility and be honest about their limitations. To examine your findings critically, put them in the most orderly form possible. Sort and re-sort your notes until all the facts fall into a pattern in your mind. Then, you are ready to pin yourself down to a final conclusion.

Formulate your conclusion. Coming to a conclusion is a crucial stage in your work. Your conclusion must derive logically and naturally from the data you have found. If you keep an open mind during your research, find all the information you need, and examine your findings critically, you should have little trouble in formulating a sound conclusion and supporting it effectively when you write.

Some writers jump to conclusions after finding some of the first valuable information. If you pursue your research with patience after the first enthusiasm wears off, you probably will gain new insight into the problem.

Formulate your conclusion in your mind and write it out. State each conclusion, indicate any limitation, and show your application or recommendations. Then check your conclusion again to be sure that you are drawing it from the facts that you have collected.

When you have done all these things, you are ready to organize your material for writing. The following checklist will help you determine if you are ready to go on to this next step.

Checklist

DO YOU HAVE ALL THE INFORMATION YOU NEED?

1. Did you adequately prepare for your research? Did you:
   a. Remind yourself of your purpose?
   b. Research your own ideas?
   c. Plan your approach?
2. Did you investigate all the available sources of information you needed to?
   a. Did you check those in your own office?
   b. Did you check those in the library, if necessary?
   c. Did you use other sources of information, if necessary?
3. Have you collected and evaluated all the information you need?
   a. Did you check your data's validity as you found it?
   b. Are your notes accurate and complete?
   c. Were you completely objective in your research?
4. Has your research been as complete as time and source allow?
   a. Have you examined your findings critically?
   b. Have you formulated and checked your conclusions?

Exercises (024):

1. **Why is a substantial knowledge of the subject necessary for a writer doing research on a subject that he or she intends to write?**

2. **Why is it necessary to survey the data collected from research?**

3. **What gains can be realized from critically examining your findings?**

4. **How does an open mind aid a researcher in drawing a conclusion?**

Reading 3

ORGANIZE YOUR MATERIAL

NOW THAT you have obtained the needed facts and information, you are ready to organize your material. This probably is the most important phase of the writing process.

Just as you "tune out" a speaker who rambles on without a logical pattern, you stop reading badly organized writing. Few of us are willing to mentally reorganize the material for such a speaker or writer. If you don't organize your material logically and in a sequence that leads your reader from one point to the next, you may as well not write at all.

LET YOUR MATERIAL SUGGEST THE FORM

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025. Summarize the principles of organizing to write.

Good organization is not just a pattern superimposed on a body of facts. Material always dictates its own pattern—or, as the architect says, form follows function. So, after you determine the purpose or function of your writing job, select a format that best accomplishes that purpose. Then organize your material to find the most logical and effective order in which to present it.

USE A SOUND BASIC FRAMEWORK

Most writing—newspaper editorials, magazine articles, short fiction, business reports, and even advertising copy—follows a three-part arrangement—introduction, body, and conclusion.

The three-part format is so logical you probably will use it for most of your writing.

There is, of course, more to organization than this simple, three-part breakdown. The introduction must capture your reader's attention, establish rapport with him or her, and announce your purpose. The body must be an effective sequence of ideas. And, finally, the conclusion must summarize the main points stated in the body and close the whole thing smoothly.

Organizing your material into the introduction-body-conclusion arrangement should be easy. The hardest part is arranging the material for the body into an effective sequence. Therefore, we will concentrate on that subject first.

ORGANIZE THE BODY OF YOUR MATERIAL

The easiest (and probably best) way to organize the body of your material is to do it in stages. The following guidelines help you do that.

Use your statement of purpose. First, get the statement of purpose you drew up when you were organizing your thinking. (You probably used it as you collected the facts you needed for writing.) Reread it, think about it, and keep it before you during this phase of your work. It helps you distinguish between relevant and irrelevant supporting material as you plan how to organize the body. Later, it helps you to evaluate the organization you come up with. Finally, it serves as the basis for the final outline of your material.

Determine the points you want to make. Deciding what to omit is as important as deciding what goes in the writing. Words, ideas, or facts that are not essential to the understanding or acceptance of your specific objective can only obscure and weaken it. Remember, whether writing is based on personal knowledge or research, the problem usually is too much material rather than too little. To organize your material, define, sift, and discard until only a clear objective and the ideas necessary to support it remain.

Identify your main ideas. A simple device, much used in advertising contests, can help you identify the main

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ideas needed to support your objective. It is the one in which contestants complete, in 25 words or less, a sentence that begins "I like (name of product) because . . . ." To the written statement of your objective add the "why" and "how" reasons that will achieve it. Limit yourself to 25 additional words so that you are forced to select only basic explanations or arguments. Remember, these are the *main* ideas, not to be confused or mixed with the facts, figures, or examples that support them.

Identify subordinate ideas. Distinguish between your main and subordinate or supporting ideas. Normally, the main ideas are about equally important. They are so vital to the purpose that leaving one out unbalances the rest. For example, the main ideas in describing an automobile might be the engine, transmission, chassis, and the body. Parts such as pistons or seats would be subordinate ideas. For another purpose, the main ideas about an automobile might be performance, economy, and reliability, while items such as 110 miles an hour, 20 miles per gallon, and freedom from repairs would be supporting ideas.

Group subordinate ideas under main ideas. After you have identified your main ideas and decided on the subordinate ideas to support them, you should group all related subordinate ideas together under the appropriate main ideas.

Exercises (025):

1. **Explain each part of the three part format used in most writing.**

2. **Explain the steps necessary to organize the body of your material.**

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026. Explain the various organizational patterns used in Air Force writing.

Choose an effective organization pattern. The next step is to arrange your main ideas in an order that leads your reader systematically and logically to your conclusion. To do this, you have to select the pattern of organization or combination of patterns that most effectively communicate your ideas to your reader.

You can find a large number of organized patterns listed in various textbooks on writing. Five patterns that Air Force writers most commonly use are listed here and discussed in some detail. Each of these is defined and illustrated by an example. This discussion of the most common patterns is followed by a brief discussion of three other patterns also used in Air Force writing. You may find all of these patterns useful at one time or another, either individually or in combination, depending on the purpose of your writing. (NOTE: These examples were selected from actual Air Force writing. We did not edit the material to make it more effective or readable.)

Enumeration pattern. Many authors call this the topical pattern. It is merely a numbered list of topics to support or explain a generalization.

> *Main idea:* A variety of special activities is available to the cadets for the purpose of developing their creative talents and hobbies. The cadets themselves have great latitude in organizing their own activities and in choosing those that they wish to join. Some of these activities are:
>
> *Detail follows in an order determined by the writer:*
>
> 1. The Wing Entertainment Committee, which arranges entertainment for the Air Force Cadet Wing.
> 2. The Talon Staff, which publishes a magazine monthly with stories and pictures that pertain to the various phases of cadet life.
> 3. The Cadet Forensic Association, which engages in competitive intercollegiate debates to learn the art of forceful and logical expression through the discussion of national and international issues.
> 4. The Cadet Ski Club, which engages in recreational and competitive skiing.
> 5. The Cadet Hunting Club, which takes hunting trips as seasons are declared for various game.
> 6. The Cadet Soaring Club, which flies gliders and sailplanes to gain practical experience in the principles of flight.

Time or chronological pattern. In this pattern, you arrange details with respect to time; from the past to the present, from the present to the past, or from the present to the future in simple chronological order.

This pattern is one of the simplest to use because you so frequently encounter facts in chronological order in reading or research that the pattern comes almost automatically. Of course, you must be careful to select only those episodes which support your central purpose. (Chronological examples only *support* an idea; they never substitute for one.)

Generally the time pattern is used in writing history, biographies, and other subjects which lend themselves to a time sequence of events. Barring [illegible]ng reasons for a different arrangement, any similar body of material should follow a time pattern.

> The history of today's United States Air Force began August 1, 1907, when the Army established an Aeronautical Division within its Signal Corps to determine military uses for the "flying machine." Two years later the Army purchased its first airplane from the Wright Brothers. By the time the United States entered World War I in April 1917, the military had received 142 aircraft.
>
> **World War I**
>
> American flying units began arriving in France in the fall of 1917. The first combat action came on April 12, 1918, and 2 days later the United States won its first aerial victory.
>
> When the war ended on November 11, 1918, there were 45 American squadrons with 767 pilots, 481 observers, 23 gunners, and 740 airplanes. Americans had flown 13,000 pursuit flights and more than 6,000 observation flights, and they had dropped 275,000 pounds of explosives on 150 bombing raids. US losses were 357 planes and 35 balloons.

Between Wars

On June 4, 1920, Congress created the Air Service and authorized 1,516 officers and 16,000 enlisted men as a separate and coordinate Army Branch . . . .

Space pattern. Use this to describe something—people, places, and things. It is the geography book pattern. When you use it, you start at one point in space and proceed systematically and descriptively all the way around what you are describing back to the initial point.

The cone of silence, which is identified by the absence of any aural signal, indicates that the aircraft is over the radio range station. The radio range signal pattern, a cross section of the area containing an absence of aural signals, is conical in shape, hence the word "cone" is appropriate.

The width of the cone varies with the altitude of intersection. At 1,000 feet at slow speed, 140 to 220 knots, it is only a second or two wide. It is very sharply defined by a maximum signal, an abrupt loss in signal as you pass the station, the signal gradually increases in intensity until you again receive the maximum signal.

Reason pattern. Here you support a point of view or opinion by presenting the reasons which support it. The reason pattern is usually the best one to use when you wish to defend a point of view or to support an idea.

Point of View: What command should be responsible for the operational training of both individuals and units? In times of peace, this type of training appears to be the logical responsibility of the operational commands.

Reason 1: The operational commands are responsible for the development and use of up-to-date techniques, procedures, and maneuvers which must be taught in the operational phase. The latest materiel is essential to successful accomplishment of this objective. In addition, the operational commands possess the technical knowhow and valuable combat experience.

Reason 2: The peacetime mission of the operational commands is confined almost entirely to training required for the development and maintenance of combat proficiency. Since combat units must be kept close to wartime strength in personnel and equipment, they have the capacity for handling heavy training loads. All this capacity is seldom required for continuation training of regularly assigned personnel. Some of it could be used for the operational training of new trainees.

Reason 3: Peacetime budget limitations restrict first line combat aircraft and material to . . . .

Problem-solution pattern. Use this one to eliminate all but one of several possibilities by showing how the others do not apply.

Problem 1: At which Air Force base should the new bombardment wing be located?

Solution 1:

(eliminated) 1. AFB "A."

a. Area of base already crowded.
b. Lack of sufficient runway.
c. Inadequate housing for airmen.
d. Lack of maintenance areas.
e. Due to heavily congested commercial air traffic in the area, lack of safe air traffic lanes.

Solution 2: 2. AFB "B."

a. Excessively bad flying conditions.
b. Inadequate housing for officers and airmen.

Solution 3:

(supported) 3. AFB "C."

a. Runway of sufficient length.
b. Adequate family and troop housing.
c. Adequate facilities for maintenance.
d. Excellent flying conditions.

Other patterns to consider. You may want to consider using or adopting other patterns. Three others described in the following paragraphs are frequently used.

Cause and effect. In this pattern, you arrange the material to show that one act, idea, or situation has caused another.

Although this pattern may seem to be a form of time sequence with materials arranged in the order in which they occur, the materials have more in common than simple chronology; they are specially selected to show that early *causes* produce later *effects.* In other words, the cause and effect arrangement is more sophisticated than simple time arrangement; not only do events occur in a certain order, but earlier events also cause later ones. If your writing assignment purpose is to explain the reason for a delay, this sequence is logical because it clarifies the causal relationship at the heart of your purpose. Another arrangement might interfere with your reader's understanding of the explanation.

Comparison or contrast. When using this pattern, you arrange materials to show essential similarities or differences between objects, events, or ideas. The comparison-contrast pattern may explain both items being compared, but usually the pattern explains only one of them. In either case, you clearly present both items to the reader. So remember to present both items of your comparison in adequate detail and show clearly the similarities and differences.

Analysis. In this pattern you arrange materials to explain a subject by identifying and examining its parts, qualities, or points. This pattern offers no particular difficulty and requires only a complete knowledge of your subject to select its important elements.

Exercises (026):

1. **Describe the benefits to be derived from each of the five patterns used by most Air Force writers.**

2. **Explain how the analysis approach can be used to explain a subject.**

3. **How does the space pattern compare to the reason pattern of organizing material?**

GENERAL PRINCIPLES TO REMEMBER

027. Explain the general principles a writer should remember when selecting an organizational pattern of writing.

Whether you use these patterns—or another pattern you develop—there are several general principles of arrangement you should keep in mind. The five listed here are keys to well-organized writing.

1. When considering patterns to use, choose the one that will *best communicate your ideas.* The choice of pattern is your choice because only you know how you wish to present your ideas. Many times, material automatically lends itself to a particular pattern of organization. For instance, if you are working on an official history, you would probably use a time pattern to sequence events from the past to the present. But, before you choose a pattern, compare it with others to be sure it is best for your particular job.

2. When possible, remember to follow the scientific rule of *inductive reasoning;* that is, a general conclusion arises logically out of a series of specific observations that have gone before. If you have firm control over your material, you may use the deductive method—one which first sets up a general premise and then proves it—but the inductive approach is always more emphatic because the specific details build up to and, thus, emphasize the conclusion. And, with it, the reader seems to arrive at the conclusion at the same time you do; he shares in the discovery of your point (Inductive and deductive reasoning were discussed in more detail in lesson 2, reading 4).

3. Lead your reader *from the familiar to the new.* Many times you will want to start from someone else's position and react to it. Or, start with a familiar notion and prove or disprove it through the use of a new analysis.

4. Similarly, go *from the simple to the complex.* If you are explaining a complicated subject, start with the simplest part of the subject, relate it to a second part that is more complicated, and so on.

5. And, most important of all, arrange your points in an order that gives maximum *emphasis.* Remember that the end is the position of greatest weight. Consequently, you should build your argument to a logical climax. Also, because the final position is the most important, it deserves your best material. Putting less important points at the end is like scheduling games in a basketball tournament so that the consolation game comes last: few care about seeing the game at that time, but many would enjoy it before the main event. Remember, too, that an anticlimax is frequently a deliberate source of humor; don't let it create unintentional humor in your writing.

Exercises (027):

1. **Explain what is meant by choosing a pattern that will *best communicate your ideas.***

2. **What role does logic play in arranging points in order?**

OUTLINE YOUR MATERIAL

028. Identify the advantages to be realized from an outline.

You can write more quickly and more easily from an outline—either a simple one in your mind or a more detailed one on paper. The next step in the organizing process is to outline.

We might compare the writer who begins to write without an outline to a carpenter who starts to build a house without a blueprint. The carpenter may be able to put the building up, but it probably will look like a hodgepodge. The same carpenter might be able to build a small garage with just a hazy plan in his or her mind; but even with this simple structure, the carpenter would do a much better job—and do it faster—if he or she jotted down some type of plan.

Likewise, a writer who is planning a long or complex writing job without an outline will have difficulty in communicating his or her ideas. The same writer might be able to write a short letter or report with just a vague plan in his or her mind; but even for such a relatively easy assignment, the writer would do a better job, *and do it faster* if he or she worked from a written outline. And, it follows that the writer with a complete outline has an easier job of writing.

Outlining actually is much simpler and easier than most writers realize. And it is even simpler and easier when you follow the steps recommended in the preceding paragraphs of this reading. All you have to do now is to use your main points arranged according to the organizational pattern you chose as the framework for the outline, and then fill in with your supporting facts and ideas. Later, you can add an introduction and conclusion.

The following is a good example of a working outline:

(Introduction)
1. First main idea.
   a. Fact and reasoning supporting this idea.
      (1) Fact and reasoning to support a.
      (2) Additional fact and reasoning to support a.
         (a) Support for (2).
         (b) Additional support for (2).
            1. Support for (b).
               a. Support for 1.
               b. Additional support for 1.

2. Additional support for (b).
   b. Additional fact and reasoning to support 1.
      (1) Support for b.
      (2) Additional support for b.
      (3) Etc.
2. Second main idea.
   a. Fact and reasoning supporting this idea.
   b. Etc.

(Conclusion)

NOTE: Don't let outlining slow you down. The more complete your outline, the easier it is for you to write from it later, but it doesn't have to be "perfect." Laboring over an outline until it details *everything* can be a waste of time and effort for a letter, message, or short report. It would be better to just jot your main ideas on paper and use them as a guide. Or, an outline may be just a series of notes scribbled on cards and arranged in a logical and satisfying order. A more formal outline can then be typed from them, but the cards themselves may be adequate for your purpose.

Exercises (028):

1. **How might an outline have an impact on a writer who is planning to write a long and complete manuscript?**

2. **How does outlining relate to the choice of an organizational pattern a writer has previously chosen?**

FINAL STEPS TO ORGANIZING

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029. Describe the final steps in organizing your material for writing.

Once you fit your main and supporting points into your outline, you are ready for the final steps in organizing your material. These steps are: first, to plan for transition to link your main and supporting ideas to each other so that the reader will understand their relationship; and, second, to plan your introduction and conclusion.

Plan for transition. Transitions do two things: they link successive ideas, and they relate individual ideas to the overall purpose of the writing.

The first of these functions—the *minor transition*—is the familiar one which links two simple elements by the use of a word or phrase such as "then," "the next point," "in the third place," "but of greatest importance." The minor transition tells the reader that a new element is coming, and perhaps tells something about the relationship of the old and the new. Minor transitions are not always absolutely essential, but they still help the reader.

The second linking function—the *major transition*—relates a new main point to the overall purpose, or a subpoint to a main point, or it may summarize the situation to that moment and anticipate the next or other developments of the main idea. For example, between two important main points, the writer should introduce the second point with a strong transition, bridging the gap between the two main points and relating the new point to the overall purpose of the writing. The transition connects the second point with the first, tells the reader that he or she is moving from point one to point two, and reminds the reader of what those points are. It also tells the reader how point two relates to the overall purpose.

The value to the reader of both major and minor transitions is obvious. They serve as guides through the writing, reminding continually of the purpose, and show how each point relates to the others and helps to achieve that purpose. Transitions also are valuable to the writer because when properly used, they help to keep the arguments relevant and the logic clear.

The subject of transition is discussed in more detail in Lesson 5. At this time just (1) indicate in your outline where you need transition—both major or minor—between your points and (2) note any ideas that you may want to use for that transition when you start writing.

Plan an introduction. Introductions usually have three things in common: they capture and stimulate the reader's interest, they focus the reader's attention on the subject, and they guide the reader into the subject. The introduction also establishes a common frame of reference between writer and reader, and it usually includes the statement of purpose.

As with transitions, now just decide what points you want to include in your introduction and roughly plan or outline it.

Plan your conclusion. An effective conclusion summarizes the content or resolves it.

If your point is uncomplicated, you may simply restate the purpose. If the subject is complicated or long, you probably want to summarize or emphasize the major points and state your conclusion(s) and recommendation(s).

At first glance, this procedure for organizing your material for writing may appear to be a very time-consuming system. However, time you spend in organizing is time saved when you begin to write. As you write, the words flow onto the paper more easily because you have already thought your ideas through and know where you want to go with them. You save time later as you edit your first draft and rewrite it because you have carefully thought through your ideas before you write. Your first draft probably will need only minor editing and rewriting. So in the long run, if you organize, you save valuable time. You write with less effort.

So, in short, organize before you write. Then, and *only* then, should you begin your first draft. Use the following checklist to decide if you have organized your material well enough to start writing.

Checklist

HAVE YOU ORGANIZED YOUR MATERIAL ADEQUATELY?

1. Did you let your material and your purpose determine the organization you need?
2. Have you divided your material into an introduction, body, and conclusion?
3. Have you arranged the body of your material according to some logical pattern?
   a. Does it best communicate your ideas?
   b. Does it emphasize the points you want to make?
4. Have you outlined your material?
   a. Does your outline list all the main and supporting points you want to include when you start writing.
   b. Does it indicate where you need transition to link the points to each other and to your purpose?
5. Have you planned your introduction?
   a. What points do you want to cover in it?
   b. Did you outline it?
6. Have you planned your conclusion?
   a. Does it summarize or emphasize your main points?
   b. Does it require a conclusion and recommendation?

Exercises (029):

1. Explain why it is important to consider the use of transitions.

2. What should a writer consider when planning an introduction?

3. What should a writer's conclusion contain to be effective?

WRITE A FIRST DRAFT

NOW THAT you have organized your material, you are ready to begin writing. If you have completed the preliminary steps suggested in the previous readings, you should by now feel *ready* to write. What's more, if you have done those steps well, this stage of your work should be free from worry--maybe even *enjoyable*. This reading contains guidance for getting your ideas on paper.

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030. Describe the guidelines for writing the first draft.

HOW TO GET STARTED

Start quickly and easily, saying to yourself, "I'll just put down the words as fast as they come, and worry later about the grammar, spelling, punctuation, and polish." Don't try to write perfect prose; you will have less trouble putting words on paper. Later (preferably a day or so later), you can edit, rewrite, and polish what you have written.

HOW TO EXPEDITE YOUR WRITING

The following ideas should help you write your first draft more quickly and easily. Adapt and modify them to fit your particular needs.

Don't worry about the introduction. Some writers take hours or even days to begin writing just because they can't think of the "perfect" opening or introduction. This wastes time. An introduction or opening that arouses the reader's interest and tells him what to expect is very important, *but you don't have to write it first.* Don't worry about your introduction; just start writing. You can always go back later and change and polish as necessary. Or, you can always add an introduction *after* you have written the main part or body.

Don't let your outline slow you down. As we said in the last reading, outlines usually are convenient and useful tools. But thinking that you have to follow your outline slavishly can slow you down. Remember, a good working outline is more of a sketch than a blueprint; it gives your writing plan flexibility if better ideas occur as you write. Use it to help you as you write, but don't let it delay the creative flow of ideas or words. If you find that it is slowing that flow, put it aside until you finish your draft. Then, later, use it to check that you have covered all your points and that you have discussed them in the most effective order.

Take one part at a time. Try not to worry about how much you have to write or how big the job is. For a long piece of writing, break your material into sections (corresponding to the main points of your outline) and concentrate on only one of those sections at a time. If you are writing from a good outline, it is easy to see just what those main parts are and how each fits into your overall plan.

Write as much as possible at a time. To write efficiently fix your attention as much as possible on your writing efforts at this stage. So write as much as you can at one sitting. Try to complete at least one of your major sections without interruption. If you do have to pause or stop, try to do so between paragraphs or, even better, between the larger sections of your material. Then, when you are ready to start writing again, reread what you have written before continuing to the next section or paragraph.

Don't try to revise as you write. You should expect to rework your first draft; you will want to edit, rewrite, and polish it. But these are separate operations and should be done later—*after* you finish the first draft. Trying to write your first draft and revise it at the same time interrupts the flow of ideas and words that is so important when you are writing the first draft. It is much better for you to write

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rapidly during this stage than it is for you to pause to try to perfect each sentence before going on to the next.

Similarly, don't stop to look up spellings or to check punctuation or grammar as you write the draft. Don't stop to search for a better word in a thesaurus. You can attend to these small but important matters after you have finished writing your first draft.

Use scissors and stapler or tape. Some writers get discouraged half way through a page, crumple it and throw it away. You can avoid such inefficiency if you learn to use scissors and a stapler or tape. Instead of rewriting entire pages or throwing away half-used sheets, cut out the usable parts and staple or tape them where they belong in the flow of your writing.

Double-space your draft. Writers who crowd as much as possible on one sheet of paper lose valuable time later as they struggle to read, edit, and change the crowded words. The typist also must struggle with such crowded pages. Therefore, whether you type your draft or write it in longhand, double-space it, quadruple-space between paragraphs, and leave generous margins at the top, bottom, and sides of the paper.

This "waste" of paper is more than justified in the time it saves when you are ready to revise, edit, and rewrite. You can change words or add new ones—or whole sentences and paragraphs—more easily if you have double-spaced between lines, quadruple-spaced between paragraphs, and left generous margins. Quadruple-spacing between paragraphs will also help if you decide to change the order of any of your paragraphs (using scissors and stapler or tape). NOTE: Sometimes writing each paragraph on a separate, half sheet of paper helps you rearrange paragraphs easily; it also discourages long-winded paragraphs.

Although the guidance above will help in writing your first draft, consider one further point as you write: *content*.

CONCENTRATE ON CONTENT

The more a writer knows about a subject, the harder it is for him or her to remember that the reader may *not* know as much about it. The writer has to remind himself or herself continually to include enough explanation and detail for the reader to understand.

Include enough detail. As you write your first draft, try to make it as complete as possible. Don't worry about including too much detail at this stage. In fact, now is the time to get in plenty of detail. It is always easier to take out superfluous or unwanted material later than it is to try to fill topics that have been done too sketchily.

Explain and illustrate. Readers are not satisfied with writing that lacks substance. They ask for more than generalizations and elaborations; they ask for specific examples that illustrate those generalizations and elaborations and statistics to support them. The key to substance in writing is content filled with explanation and illustration. This means that you must clearly explain and illustrate ideas. Provide necessary examples from your own knowledge that are interesting, relevant, concrete and specific. This work makes the task of the reader easier, and it helps him or her understand what you want him or her to know.

HOW TO STOP

One of the cardinal rules of good writing is to know when to stop. Some writers have trouble stopping. They keep finding a new idea, a new reference, a new quotation, or a new authority to add; they qualify and requalify each statement. Other writers produce long, rambling introductions; they warm up and warm up and warm up, and can't seem to get beyond their introduction. Others keep thinking of more things to add to the conclusion and just can't seem to conclude their writing.

A good outline helps you to tell when you have reached the end and when you should stop. By checking your end product against your outline, you can tell if the introduction, the discussion, or the conclusion are too detailed and too long.

Why not say to yourself about every interesting but not vital point, "Yes, that's an interesting item, and it certainly deserves to be written up. It can be left out here, though: I'll save it for another paper." In other words, learn to discern and to eliminate nonessential points. And always remember when you write that two of the most delightful words in the language are: "In conclusion. . . ."

The following checklist will help you determine whether your first draft is adequate for your needs.

Checklist

HAVE YOU WRITTEN AN ADEQUATE FIRST DRAFT?

1. Does your draft include enough detail for your reader?
   a. Have you clearly explained and illustrated your generalizations?
   b. Have you given your reader examples of what you mean?
      (1) Are your examples relevant and interesting?
      (2) Are they specific and concrete?
2. Have you stopped when you have given your reader as much information as is needed?
   a. Is the introduction adequate but not too long?
   b. Is the body complete but not too detailed?
   c. Is the conclusion adequate but not too long?

Exercises (0.30):

1. List seven techniques that can assist you in expediting your writing.

2. Describe the problems some writers experience in trying to stop their writings.

3. Explain how concentration can aid the writer in writing the first draft.

Reading 5

EDIT, REWRITE, AND POLISH YOUR WRITING

WRITING is an art. As with arts, skill comes only with practice. Even experienced writers find that writing is a difficult, time-consuming process. It is a process of drafting, patiently rewriting, and deleting or adding, with progressively more rethinking to achieve efficiency of expression.

Putting this another way, most *readable* writing isn't just dashed off easily and quickly. The key technique in learning to write clearly is learning to rewrite. A writer should rewrite anything that isn't clear and keep rewriting until it is clear. This reading suggests how to review, edit, and rewrite your writing.

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031. Summarize the process of editing, rewriting, and polishing your first draft.

REVIEW YOUR WRITING

Review of writing really comes in two forms: (1) review of the substantive content—the *technical review*, and (2) review of the writing itself—*editorial review*.

Many people confuse these two kinds of review. A paper circulated for review may come back with the notation "All wrong; full of errors." Yet when you check with the reviewer, you find that he or she is concerned only with a few misspellings, a wrong date, some typographical errors, and one or two obscure statements.

On the other hand, another reviewer may approve the nice appearance and the smooth flowing prose of a paper, but completely overlook the technical errors. Or, an operating official may reject a letter as "poorly written," without distinguishing whether the deficiency is in the writing style or in the facts and thoughts presented.

General review guidelines. Obtain both technical and editorial reviews during the "draft" stage of writing on the next-to-final copy. Reviewing writing typed in final form can be embarrassing to both the writer and the reviewer and waste the typist's time. To pin down what they mean when they say that writing is "good" or "bad," reviewers should use questions such as these:

Purpose. Is the purpose stated? If so, did the writer attain the purpose through a logical development of the subject?

Assumptions. If assumptions are stated, do they appear to be reasonable? Are they true assumptions and not confused with facts? If not stated, are they apparent in the presentation, and does the thesis stand or fall on the validity of these hidden assumptions?

Objectively. In presenting material, are all issues explored with reasonable impartiality, or are some weighted unfairly to support the thesis? Is there an objective appraisal of alternatives, and does it result in a reasoned choice?

Credibility. Are the arguments supported by facts? Are the facts interpreted logically? Are the conclusions drawn from arguments presented in the body of the paper?

Breadth of vision. Is the subject treated in proper perspective, or is it treated as in a vacuum, although it is part of the problem?

Other general points to check. To evaluate the draft further, both the writer and reviewer should check the following:

> The draft as a whole—the plan, the proportioning of parts.
>
> The accuracy of title, table of contents (if any), and introduction.
>
> The agreement of headings (if any) with the table of contents.
>
> The proportion of unit parts.
>
> That conclusions flow logically from the body of the paper, and that any recommendations have been thoroughly tested for suitability, acceptability, and feasibility.
>
> Details of text—transition from topic to topic and from part to part; sentence structure; wording; spelling; etc.

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Specific points to consider. The checklist below suggests some specific points to check in both the technical and editorial evaluation.

HOW TO REVIEW AND EDIT YOUR WRITING

Writing is ordinarily reviewed and edited either by the writer (the personal method) or by someone other than the writer (the partner method). If time allows, a writer should use *both* of these methods to review and edit his or her writing.

The personal method. When reviewing and editing your writing, switch your viewpoint to the reader's. A good way to accomplish this is to lay your copy aside for a day or two before editing it. You then look at it somewhat the same as your reader who comes *cold* to your message. You can better edit the language and the sentence constructions that might be misunderstood.

This *cold-eye* approach is valuable, but unfortunately you can't always take the time to use it. You may have to send your message or letter almost immediately. This means that you have to develop editing techniques that produce the cold-eye effect.

Checklist for Reviewing and Evaluating Writing

TECHNICAL EVALUATION

1. Does it fulfill objectives?
2. Does it cover essential points?
3. Does the preface or introduction explain what is to come and in what order?
4. Are the proper acknowledgements and assumptions included?
5. Is the problem stated so it agrees with the objectives?
6. Are the conclusions or recommendations significant, pertinent, and valid?
7. Are the findings supported by the data presented?
8. Does the main discussion or body describe the data, tests, procedures, etc., with completeness and accuracy?
9. Are specific sources given for all information?
10. Is the information exact and accurate?

WRITING EVALUATION

1. Is the arrangement and order of presentation well balanced?
2. Is there a suitable title page, table of contents, list of illustrations (if needed)?
3. Is the writing clear, precise, and readable?
4. Are the sections and subsections identified with accurate and interesting headings?
5. Are the typographical errors corrected or marked for correction?
6. Are the illustrations, charts, and tables (if any) accurately numbered for identification? Do they appear near the data they support? Are they referenced to the sections they support?
7. Is the level of language appropriate to the readers:
   a. Too technical?
   b. Too bureaucratic?
   c. Too much jargon?
8. Are abbreviations and new terms explained?
9. Is the transition adequate from topic to topic, paragraph to paragraph, and sentence to sentence?

One such technique, recommended by many writers, is to read your material three times, concentrating on only one particular problem each time. (NOTE: You may find that you edit better if you read your writing aloud.)

First reading. During your first reading, check only the content.

Does it contain sufficient information?
Are more examples needed?
Do the facts need more interpretation?
Are the sources the best obtainable?
Has too much material been included?
Is the writing based on sound reasoning?

Second reading. In your second reading, check the effectiveness of *organization*.

Is the subject stated clearly?
Is the subject advanced in clear-cut stages? Is the connection between stages clear?

Third reading. In your third reading, check *sentence structure*, *diction*, and *typographical style*.

Are sentences correct and effective?
Is monotony avoided by varying sentence length?
Are words specific and concrete rather than vague and abstract?
Is your typographical style consistent?
Can you improve sentences by deleting deadheads and rescuing smothered verbs?

Then rewrite, changing the draft by your three readings. As you do so, rephrase all sentences that aren't clear.

The partner method. All writers have certain limitations as critics of their own writing. For example, a writer's word choice may be too abstract, the sentences too long and involved, the organization confused, the meaning obscure—any of a number of faults may be present without the writer's being aware of them. The reason for this seeming contradiction is that it is natural for a writer who reads his or her own work to read into it what was *intended* to say rather than what was *actually* said. Even the best writers have trouble editing their own work.

What, then, can a writer do to help eliminate the possibility of the reader's misinterpreting or misunderstanding? The answer is simple.

Try your manuscript on the person next to you. A disinterested reader can see the work more objectively than you can and identify errors, ambiguities, and awkward phrases.

If your reader can tell you nothing more than that the meaning is not clear, he or she is providing necessary criticism, leaving you the responsibility of finding out *why* the meaning didn't get across and then *doing* something about it. If, at the same time, your reader can tell you that the solution to your problem is illogical, or that you are too wordy, or that the organization does not follow a natural sequence, your reader is an even more valuable critic. Strangely enough the person at the next desk can do all of this and more, if you ask him or her to become your reader. Your reader doesn't need special training for this work—just common sense and an attitude of doing for you what your reader would like you to do for others. (NOTE: If you ask another person to read and criticize your writing, accept the criticism and thank your reader for it. Don't argue with your reader. Your reader is doing you a favor because your reader represents your other readers. You should listen to him or her objectively. It's not up to your reader to prove why he or she doesn't like what he or she reads; the *burden of proof is on you.*)

Here are a few recommendations about what such a partner should look for and suggest to the writer:

Purpose. Is the writer's purpose clear? If not, ask the writer to tell you what he or she means. Work out a statement of purpose that is clear to both of you.

Organization. The writer's difficulty may be overall organization. What is he or she trying to say? Are the main ideas easily identified? Are they appropriately emphasized? Are they listed in logical sequence? Discuss the whole paper with the writer. Ask the writer to jot down the main ideas he or she wants to communicate. The writer's notes will serve as a rough outline. If major points within the paper are well developed, total organization can sometimes be improved by shifting whole paragraphs.

Transition. Does the thought move easily from one point to another? If there are sudden jumps, suggest:

Transitional words, phrases, or clauses.
Additional sentences or paragraphs as transitional devices.

Support. Does every sentence support the overall purpose? Is each main point adequately developed? Is the reasoning valid? Does the writer use sound evidence? If support is needed for general statements, suggest:

Concrete rather than abstract words.
More specific examples.
Quotations from experts.
Comparisons and statistics.

Readability. Is the writer showing off? Does he or she conceal meaning in big words? Are the sentences too long and involved? If so, suggest:

Replacing showy words with more familiar ones.
Rescuing smothered verbs.
Removing deadheads.
Breaking long sentences into two or more sentences.

Grammar. Is the paper written in standard English? Is the grammar satisfactory? Are there distracting errors in verb form, agreement, etc.?

Punctuation. Does punctuation function as an aid to clarity? Does it do its job without calling attention to itself?

Typographical style. When you edit copy, remember that good typographical style is a must if writing is to be easy to read and understand. Typographical style has to do with capitalization, spelling, punctuation, figures, abbreviations, addresses, and titles. Consistency is one of the most important principles of style. For example, if you do not capitalize *r* in *Ohio river* the first time in your manuscript, continue the practice; do not later write *Ohio River.* (NOTE: See figures 5 and 6 for marginal notes and examples of usage of these proofreaders marks.)

Points to remember when reviewing and criticizing writing. Don't become impatient with clumsy wording, awkward phrasing, and confusing statements. Frequently, a reviewer is tempted to slash viciously with a blue pencil and write sarcastic criticism on the margins of a manuscript. But most writers—except for a few who are plain lazy—try to write well. They have pride of authorship and their feelings may be easily hurt. To criticize a person's writing may imply to the writer criticism of his or her intelligence, judgment, education, and upbringing. All things considered, therefore, an editor or reviewer—or supervisor—should control impatience with a writer and keep criticisms constructive and free of hostility.

For all reviewers and editors. Reviewers should always remember that a good review is (1) responsible, (2) consistent, and (3) objective. They should remember, too, that the purpose of writing is to carry a message to a specific audience. How well that audience receives the message is the ultimate test.

Anyone reviewing the writing of others should also distinguish between essential changes, worthwhile changes, and unimportant changes. The possible value of any suggested revision also should be weighed against its cost in time and effort. Finally, the reviewer should distinguish his or her substantive changes from his or her literary improvements, and he or she should correct the writer as a helper or teacher, not as a disciplinarian.

For supervisors. Supervisors reviewing and criticizing the writing of subordinates should, in addition to the above points, consider the following guidelines.

The following marginal notes may be useful in editing copy under the partner method of review:

agree	Pronoun and antecedent or subject and verb do not agree
amb	Ambiguous
awk	Awkward construction
cap	Use a capital letter
clear?	Is this clear?
coh	Lacks coherence
colloq	Colloquial expression
dead	Deadhead word; eliminate it
dng	Dangling expression--lacks connection
emph	Is this arrangement emphatic?
gr	Faulty grammar
jarg	Jargon
lc	Use lower case (not capital) letter
¶	Make this a new (separate) paragraph
no ¶	This should not be a separate paragraph
pass	Passive voice; should be active
pn	Punctuation faulty or needed
ref?	To what does this pronoun refer?
rep	Repetitious or redundant
smo-verb	Smothered verb
sp	Incorrect spelling
|| str	Construction not parallel
tense	Change tense of verb
tr	Transpose letters, words, sentences, etc.
trans	Transition needed
trite	Word or expression overworked
true?	Is this true?
vague	Need more details
wordy	Should be shortened

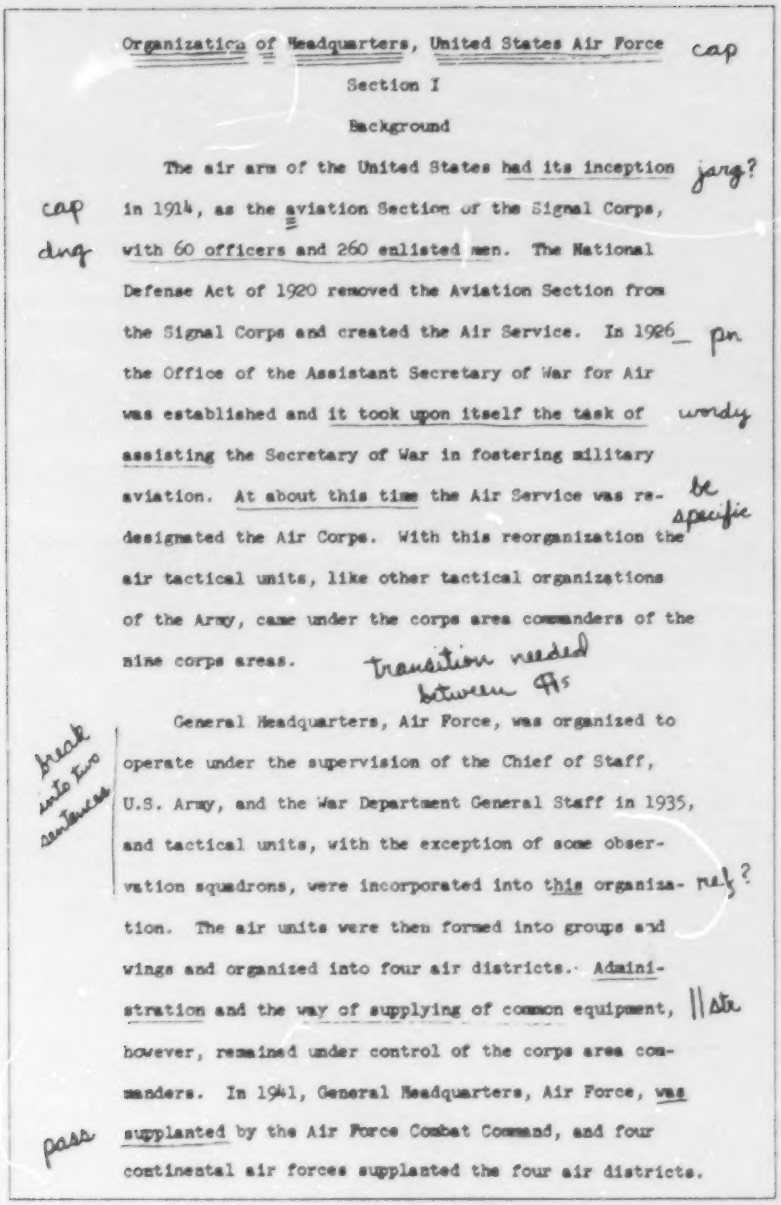
Figure 4-1. Marginal notations.

First, remember that no one writes badly on purpose, and only a few do so from laziness. So handle your subordinates with tact and patience when you criticize their writing efforts.

Second, some of the people on your staff may write some clumsy letters, reports, etc., but unless the things they write are wrong or could cause a misunderstanding, let them go as written. Then, *help* them to write better the *next* time.

When you are tempted to "nitpick" something a subordinate has written, ask yourself: "Who will read it? What real harm can it do if it is less than perfect?" And, "Is it really badly written, or is it just written differently from my standards?"

The following illustration shows how these marginal notes are used.



Organization of Headquarters, United States Air Force — cap

Section I

Background

The air arm of the United States had its inception — jarg?
cap in 1914, as the aviation Section of the Signal Corps,
dng with 60 officers and 260 enlisted men. The National
Defense Act of 1920 removed the Aviation Section from
the Signal Corps and created the Air Service. In 1926 — pn
the Office of the Assistant Secretary of War for Air
was established and it took upon itself the task of — wordy
assisting the Secretary of War in fostering military
aviation. At about this time the Air Service was re- — be specific
designated the Air Corps. With this reorganization the
air tactical units, like other tactical organizations
of the Army, came under the corps area commanders of the
nine corps areas. — transition needed between Ps

break into two sentences — General Headquarters, Air Force, was organized to
operate under the supervision of the Chief of Staff,
U.S. Army, and the War Department General Staff in 1935,
and tactical units, with the exception of some obser-
vation squadrons, were incorporated into this organiza- — ref?
tion. The air units were then formed into groups and
wings and organized into four air districts. Administration — ||ste
and the way of supplying of common equipment,
however, remained under control of the corps area com-
manders. In 1941, General Headquarters, Air Force, was
pass supplanted by the Air Force Combat Command, and four
continental air forces supplanted the four air districts.

Figure 4-2. How to use marginal notes.

Remember, too, that people do not write better simply because they are told to do so. They should be told in what respect their writing needs improvement and then guided to the type of improvement they should seek. Be constructive and *creative* when you review. (NOTE: Creative reviewing, like creative leadership, does not mean that a supervisor should permit inadequate performance. The purpose of creative reviewing is to help subordinates write better—not help them make excuses for their faults. But, also like creative leadership, creative reviewing does everything possible to help a subordinate develop and grow as he or she works.)

For writers. Every writer should expect to have his or her writing reviewed, criticized, modified, and edited by a supervisor. And you should seek such review and

criticism from others. You always write as well as you can, of course, but be willing to accept criticism gracefully and readily. It helps you to become a better writer.

ENSURING READABLE WRITING

Rudolf Flesch, Robert Gunning, Edgar Dale, and John McElroy are among the best-known experts who have developed ideas on how to write more clearly. They believe we have forgotten that our reader is very likely busy, somewhat tired people who like to read the lighter parts of the newspaper. But we force them to struggle with words and sentences that would strain a college professor. We seem to be trying to *impress* rather than *express*, and the result is not very readable.

Several factors determine whether something is easy to read and to understand, but two things, sentence length and word difficulty, are the most important in measuring reading ease.

Obviously, then, we must use words our reader can easily understand, and we must put them into fairly short, uncomplicated sentences.

Reading material category	Reading-ease level
Pulp fiction (westerns, *True Story*)	5th grade
Slick fiction (*Playboy, Cosmopolitan, Ladies' Home Journal*)	6th-8th grade
Digests (*Reader's Digest, Time*)	8th-10th grade
Quality (*Harper's, New Yorker, Business Week*)	High school graduate (11th-12th grade)
Scientific (Professional, Technological, and Scientific Journals)	College graduate (above 16th grade)

But what does all of this readability testing mean to us? Certainly a readability yardstick is *not* a formula to write by, and we shouldn't expect it to be. But such a yardstick is useful. It is a handy statistical tool for measuring complexity in writing. It can help us determine whether our writing is actually geared for our reader.

The accompanying table indicates the reading-ease level for several different categories of reading matter. The popularity of the publications listed in the top four categories also indicates the reading levels many people prefer.

This doesn't mean that we should aim for people with 5th- or 8th- or 10th-grade intelligence: it means the words and the way they are used should be *easily comprehended* at these grade levels. There isn't anything derogatory about this. We developed our basic vocabulary by the time we finished the 10th grade, and because we went to an English class every day, our knowledge of sentence structure and of grammar was probably fresher than it is now.

What about our writing—Air Force writing? How readable is it? According to the readability yardsticks, many of our written communications are as difficult to read as scientific journals. In an analysis of a random sampling of Air Force regulations and correspondence, we find they have a reading-ease level of grades 16 or 18. That calls for a master's degree!

The main reason for this seems to be our use of long, involved sentences. The wordload or difficulty level, though much too high, is about the same as the *Atlantic Monthly* or *Harper's*, but the average sentence length is almost fantastic. We use so many unnecessary words, we add so many qualifying phrases and clauses, we string so many ideas together, that our sentences become very involved and hard to understand. We force our reader to keep a number of relationships straight before he or she can get the real meaning of the sentence.

Over the years the popular magazines have used an average sentence length about half that of our military writing. One research bureau found during a seven-year study that *Reader's Digest* averaged 14-17 words per sentence and *Time* averaged 16-17 words. No popular magazine ever went over a 22-word average at any time during this seven-year period. But the sentences in some of our regulations average 35-40 words, with individual ones going as high as 50-60 words per sentence.

When you realize that regulations contain orders that must be put into action by people on the line, you can begin to understand why things sometimes go wrong. People can follow orders only when they understand them. Writing that is easy to *read* usually is easy to *understand*. Your reader may say your ideas are too simple but will never complain that your writing is too clear or too easy to read.

Checklist

HAVE YOU EDITED, REWRITTEN, AND POLISHED YOUR WRITING ADEQUATELY?

1. Have you edited your writing carefully?
   a. Is your objective or purpose clearly defined?
   b. Are your assumptions supported by facts? Are they logically stated?
   c. Have you organized your writing to permit the reader to move smoothly from one idea to another?
2. Did you check the readability of your writing?
   a. Have you cut out difficult words wherever possible?
   b. Have you broken long sentences into shorter ones when possible?
3. Have you rewritten and polished your writing as much as necessary?

Exercises (031):

1. Describe the two forms of review a writer should use when reviewing a writing.

2. Give some examples of how a writer might evaluate a writing to determine whether it is good or bad.

3. Explain the technique to be used when employing the personal method of reviewing and editing a writing.

4. Describe the advantages of using the partner method of writing.

5. State what is meant by readable writing.

Lesson 5

READABLE WRITING

Lesson Objective: Comprehend writing mechanics, grammatical usage, and sentence and paragraph construction.

Introduction: As was pointed out in the previous lesson, when you write your first draft your efforts are devoted to getting your thoughts on paper. During the review and editing process, you polish your writing. Polishing your writing requires you to insure that your sentences and paragraphs are constructed properly and that the rules of good grammer are applied. This lesson is devoted to the mechanics of writing, grammatical usage, and sentence and paragraph construction. Reading 1, "Effective Writing," reviews the basic "building blocks" of writing: the word, the sentence, the paragraph, and a common pattern of exposition. Reading 2, "Use the Right Words," stresses using words that express your meaning and covers problems created by incorrect word usage. Reading 3, "Sentence Control: Solving an Old Problem," discusses ways to use sentences to better transmit your meaning and make your writing as easy to read as possible for your readers. Reading 4, "How to Write Effective Paragraphs," describes effective ways of organizing your sentences into meaningful reading units. The material in this lesson can help you in any writing that you do.

Reading 1

EFFECTIVE WRITING

by

Lt Col Henry F. Lippincott, Jr., USAF

I AM A LITTLE reluctant about lecturing this morning, especially as an expert on Air Force writing, because I don't much approve of lectures and I am not sure I am an expert. When the dean of American economic historians retired from Harvard this spring,[1] he was quoted as follows:

> I have come to have increasing doubts about our education system, particularly about lectures. Class discussion—very good. Office hours—very good. Lectures? They are Middle Ages, they are pre-Gutenberg. It's not an adult way. The adult way is for students to sit down on the appropriate part of their anatomy and study. But lectures? They sit there dreaming and the lecturer has to go into histrionics to wake them up.

So much for lectures. The reason I hesitate to pass myself off as an expert is that I have to admit I have just as much trouble as most of you do in getting letters and drafts past my boss. What I send in gets chewed up by the full colonels and generals just like everyone else, and I cannot claim to have the inside word as to how Air Force writing always works. Because, of course, we always write *for* someone and *to* an occasion, and the question of audience in any writing or speaking is always paramount.

On the other hand, our generation in the Air Force—those of us who are at about the 20-year point—has seen a great change in the Air Force's attitude to written communication of all kinds. We all remember back in the late fifties—Colonel Jack Tarr was Director of Administration—when our correspondence procedures were overhauled and simplified. Among other changes, the Air Force threw out the Disposition Form and the letter format with five or six lines of wasted space in the heading which increased the likelihood of a two-page letter instead of just one. Even more recently, I think, we have seen the handwritten note emerge as one of the primary ways we communicate informally within our own offices. At the same time, back in the fifties, the Air Force really got behind the readability theories of Rudolph Flesch and others, and we had workshops in plain writing at every base and as a part of the curriculum at professional schools. The result is, I hope you will agree, that our colonels and generals, on the whole, write a good deal better than they did when we first came into the service. We are all pretty much on the same wave length now about keeping writing direct, simple, and to the point. Yet none of us can afford to be complacent in this matter.

I realize that what I am going to talk about today is probably not going to change the basic writing habits of any of you, especially those who have had a lot of successful staff experience at high levels. But it is a good idea, from time to time, to review basic principles, which is what we are going to do, and along the way, we will have a look at why our writing becomes pompous and self-important.

The first thing I would like to stress is that writing is an unnatural and artificial action for us all. As youngsters before we started school, most of us learned as much as we will ever need to know about speaking American English. Although in school we would learn new words and more complex ideas, we had already mastered the raw materials for effective verbal communication. By contrast, writing is a skill we learned after we went to school, and we learned it most imperfectly and over a long period, starting at about the same time that we learned to read. Unfortunately, though, writing rarely

This article, which is condensed from a recent lecture to the students at the Air War College, reviews the basic "building blocks" of writing: the word, the sentence, the paragraph, and a common pattern of exposition. These principles are important for ROTC cadets and teachers alike as background for Air Force writing of all sorts. The article supports AS 300 Lesson 2. Colonel Lippincott, whose doctorate is in English, is a former Associate Professor at the Air Force Academy.

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becomes the automatic act for most of us that reading and speaking are, and for most of us, writing is a chore for the rest of our lives.

BE CONVERSATIONAL

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032. Discuss the conversational method of writing.

For this reason, then, the best advice I can give anybody in writing is to "be conversational." If you would not say it, don't write it. If you know what you want to communicate and can dictate it to a good stenographer, so much the better. Many successful men and women use this technique. Unfortunately, the number of times in the Air Force that I have had even a competent typist at my disposal is few, and far less often have I had someone who could take dictation. Moreover, the ability to dictate efficiently is another skill which has to be learned. Most of us still need to put pencil to paper or man the typewriter ourselves on occasion to write out a draft.

But when I say, be conversational, that does not mean that we can write everything we say. I remember as a young officer having difficulty with an NCO who could not write airmen performance reports. One day I sat down with him and said, "Okay, tell me about Joe"—or whoever it was we needed an APR for—and I took down what he had to say, poor grammar, slang, the whole bit, on the typewriter. When I read it back, it was super—it really told about Joe—but we never would have gotten it through Personnel. For there is a decorum to what we write which we don't always observe in speech. You may remember that President Eisenhower was criticized for incoherent press conferences. It is true that the transcripts of the press conferences were incoherent, but the conferences themselves were clear, because Ike was communicating verbally and speech does not always reduce coherently to the printed word.

The rule is, then, *if you would not say it, don't write it,* although as we have seen, the reverse is not true—don't write everything you say.

Now if we make our writing more conversational, what will it do for us? Most important, it will help with the *tone* of what we write. There is a temptation for all of us to sound self-important, and this vice is especially prevalent among senior officers. I once worked in a staff job where there was a senior colonel who did nothing but rewrite plain English into a more elevated style he thought more suitable for our general to sign his name to. He was full of fashionable phrases such as these:

State of the art
Order of magnitude
Narrow band of considerations
Strategic landscape
Nuclear panoply
Common denominator
Abundantly clear
Obtain a feel for
Get the project off the ground

(This list comes from a new Air Command and Staff College manual called *Tongue and Quill.*[2]) Please avoid these phrases. They are simpler and more conversational ways to express all of these concepts, and the use of these phrases has become trite and tired.

Similarly, stay away from self-important words. The following words, for instance, are all in the dictionary and their occasional use is not necessarily bad, but in the military they are all overused.[3]
Try to avoid words in this list:

interface	dichotomy	vis-á-vis
parameters	aegis	fiat (as a verb)
quantify	caveat	per se
spectrum	quid pro quo	facets
optimize	inter alia	rationale
maximize	obviate	posture
prioritize	exacerbate	-wise
finalize	hopefully	viable

Interface, parameters, and *viable* are all words from the sciences with legitimate meanings. To overuse them as metaphors in nonscientific writing becomes tedious. *And/or, caveat,* and *fiat* are all legalisms. Avoid *and/or* especially; it rarely makes a meaningful distinction. Never use a foreign word or phrase to replace a plain English one. The colonel I told you about who rewrote our letters for the general was especially fond of *inter alia,* which means "among other things." Before I met him, I had gotten along perfectly well without the phrase, and I don't plan ever to use it. Even *etc.* can often be omitted. I understand that *dichotomy, exacerbate,* and *vis-á-vis* are so often used by students at the Air War College that they now automatically raise a laugh. Enough said for dichotomy, exacerbate, and vis-á-vis. The final word on "-wise" constructions, such as *career-wise* or *performance-wise*—the list is infinite—was spoken by Shirley MacLaine in the old Jack Lemmon movie, The Apartment: somebody complained, and Shirley came back with "That's the way it crumbles cookie-wise!" And finally, the current fad word is "hopefully." Only people can hope, so that to say "the war will hopefully end this year" is not logical. Instead, try to say, "We hope the war will end this year." Writer Jean Stafford has a sign on her back door which reads: "The word *hopefully* must not be misused on these premises. Violators will be humiliated."[4]

These, then, are all ways to sound self-important. Most of us don't use these words and phrases when we speak among ourselves, and there is no need to switch into a specially impressive vocabulary when we write.

One reason, I think, that fancy words creep into our writing is that many of us self-consciously assume we have a limited vocabulary. May I assure you that I have never met an Air Force officer of our generation whose vocabulary was not completely adequate for the

communication jobs we do. I doubt that anyone in this room is ever at a loss for words when he speaks, so it is my contention that if we use the same words in both writing and speaking, we will communicate more easily and more naturally.

THESAURUS V DICTIONARY

Because of this self-consciousness over a supposed limited vocabulary, many officers I know make use of a thesaurus when they write, but I would like to suggest that such use should be avoided. Part of the problem lies with Miss Klutz, the English teacher we all had in high school, who wanted us to "vary the diction." If we called it a book the first time around, then she wanted us to call it a volume the next time, and a tome the third. But varying the diction in this way is actually a vice of style, "elegant variation," and the mature writer calls it a book for the first time and sticks to that word throughout.

The other problem with the thesaurus is that it does not differentiate meaning. Some of the self-important words we have been looking at have very precise meanings in the sciences or law, but we tend to use them imprecisely in every-day usage. I personally very rarely turn to a thesaurus, and that is not because I have an especially large vocabulary. What I do turn to, repeatedly, is the list of synonyms in my *Merrian-Webster's New Collegiate Dictionary*. Instead of asking, "What is another word for _____ ?" to vary the diction, what we should be interested in is "What is the difference between this word and others which have a similar meaning?" To take a series at random, what are the shades of meaning which differentiate precipitate, headlong, abrupt, impetuous, and sudden? When I go to a thesaurus, these words appear to have identical meanings, whereas if I check the synonyms in the dictionary, I see the slight differences between the words which will make my writing precise. So try to break yourself of the thesaurus habit, and put the emphasis on thinking through carefully what you write. Check synonyms for the shades of differences between words, and always prefer the simple word to the complex if it will express your meaning as well.

A good way to test your writing for a self-important tone is to read it out loud or have someone read it to you or listen to it read on a tape recorder. Ask youself: "Does this sound like me? Would I say these words in normal conversation? Would I use these expressions?" If the answer is "No," then rewrite. Remember that speaking is always the natural way to communicate and writing is always unnatural. Do not emphasize these differences with impressive tone and diction, but play them down. Write as you speak.

Exercises (032):

1. **Discuss the rule for writing conversationally.**
2. **Explain the "tone" of writing.**
3. **Discuss self-important words and use of them.**
4. **Discuss the benefits of using a dictionary rather than a thesaurus.**

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033. Discuss the organization of writing.

The second thing I would like to talk about is organization, for that is really what good writing is all about. We might call writing organized speech, for frankly the organization is far more important than quibbling over which word to use. Let us very briefly review what organization means in writing, starting with the sentence and the paragraph, and then remind ourselves how paragraphs go together to make a coherent statement. All of this should be by way of review for you. If it is not review, I suggest you get out your *Guide for Air Force Writing*, AFP 13-2, and read it carefully. It is now in its third edition—1973—and there is a copy in every Air Force office. It is a great book to refer your people to if they have trouble with writing, and to do that, you, yourself, ought to know what is inside.

THE SENTENCE

Let us start with the sentence. As you may know, English is not what the linguists call a *synthetic* language: that is, unlike German and Greek, English does not depend primarily on word endings or inflection to determine meaning. In the present tense of most English verbs, for instance, there are only two inflections: we say, "I work, you work, they work," but also "he works," with an *s*. In the past tense, it is even simpler; we use "worked" for each person, "I worked, you worked, he worked." In Greek, there is a different ending or verb form for each person and for each tense. And the same holds true in these languages for all the other parts of speech, so that the whole language system is extremely complex and hard for nonnatives to learn. By contrast, English is relatively simple. It is not synthetic but *analytic;* that is, English depends on the order of words, not word endings, to express meaning. In English, there is a difference in meaning between "John saw the dog" and "The dog saw John." The same difference is expressed in Greek by word endings, and the arrangement of words is not important.

SUBJECT, VERB, OBJECT

The English sentence, then, is composed of three basic forms, subject, verb, and object. Because English is an analytic language, it is important for clarity to keep subject, verb, and object as close together in the sentence as possible. If you conscientiously follow this single rule in revising your sentences, I guarantee it will pay off in increased clarity and readability. A close relationship between subject and verb is more important than the relationship between verb and object, so try always to

avoid stating the subject and then introducing a phrase or clause. Avoid a sentence like this one: "John, although he was blinded by the sun, saw the dog." The temptation is always for the noun nearest the verb to cancel the real subject and to create possible verb agreement error. Instead, if you have modifiers—phrases or clauses which expand on your meaning—place them in the sentence, whenever possible, outside the central core of subject/verb/object. Put them in front—"Although John was blinded by the sun, he saw the dog"—or put them out back—"John saw the dog, even though the sun was in his eyes." When you revise, keep subject/verb/object close together, and your style will be tighter and clearer. The related rule is *always check the agreement of subject and verb* in every sentence you write.

PASSIVE VOICE

The other aspect of sentence style we should consider is the question of passive voice, for it remains the chief vice of military writing and a genuine problem. Consider subject/verb/object again. In the active voice—"John saw the dog"—the subject acts on the verb to the object. As we have seen, this is the normal, natural word order in English. In the passive voice—"The dog was seen by John"—the action of the verb refers back to the subject, and the actor is buried in a prepositional phrase. Or to put it another way, the normal English order is reversed, and we have object/verb/subject. Notice that the verb *to be* is always a part of the passive. Whenever you have the verb to be plus a verb form, suspect the passive.

Now what is wrong with the passive, except that it violates normal word order? The problem is that the actor is hidden or not stated. "The order was issued." Who issued the order? We don't know, and if we are lucky, no one will ask. The passive voice deliberately adds ambiguity and confusion. It helps "dazzle 'em with your footwork." It sweeps the evidence under the carpet, and it is thus dishonest. I am not saying that the passive is not sometimes perfectly legitimate. Occasionally we have to use it; nothing else works. But far too often the thought is clearer and the sentence is easier to read if we rearrange it into the normal order of subject/verb/object. Sentence after sentence with the verb in the passive voice is almost impossible to read without getting a headache, and the constant effort to find the actor is very fatiguing. You soon feel like Wolcott Gibbs when he wrote (in another context), "Backward run the sentences until reels the mind." So whenever possible, stick to the active voice.

A final word about sentences. The readability people say we should write sentences no longer than about eighteen words.[3] That is much shorter than the sentences most of us write. But it is about average for *Time* magazine; it is about average for the *Reader's Digest*. It is hard to write sentences of only eighteen words, but *hard writing makes easy reading.*

Exercises (033):

1. **Discuss the difference between synthetic and analytic languages.**
2. **Explain the proper order of a sentence.**
3. **Discuss the difference between passive and active voice.**

PARAGRAPHS

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034. Explain good paragraph structure.

Let us go on and see how sentences are arranged into paragraphs. Good sentence structure is important, but good paragraph structure is even more important. If most of us write sentences that are too long, we also write paragraphs that are too short. Now I am not speaking about the fellow who opens a paragraph on page one and does not close it until he has finished on page nine—that's called "paragraph sprawl." Most of us, though, still remember that Miss Klutz was big on paragraphs, so we tend to open a new paragraph every two or three sentences, "every time there is a new thought," or some such rule. And of course the newspaper makes each sentence a new paragraph for easier reading in the column of newsprint. But the mature paragraph, the one we write for our bosses to sign their names to or those we put our own signature blocks under, should usually be four or five sentences long. It almost always takes at least that many sentences to set up a point and develop it coherently.

Remember what model paragraph structure looks like? This is one case when sticking to the model is the best advice anyone can give you. The model paragraph starts with a topic sentence, the statement which advances your argument or exposition. Following the topic sentence are usually three, four, or maybe five, but rarely more than five, good solid supporting sentences. And finally the paragraph has a good sentence of conclusion and transition into the next paragraph. How tremendously satisfying this simple pattern is! I will go out on a limb and say that ninety-five percent of all good expository prose follows this pattern. There are other ways to structure the paragraph, but they belong to creative writing, not to the Air Force writing you and I do daily.

Now the problem with paragraph structure is that most people do not speak in perfect paragraphs, and writing does not usually come out in paragraph form in the first draft. Paragraph form must frequently be *imposed* on material. This process we call organization or structuring, and as I said earlier, structure is one difference between ordinary speech and writing. When you revise a draft, then, take a look at paragraph structure. If you have not consistently written model paragraphs, rearrange the

sentences and add additional material until you have a structure. Here is the heart of the process called writing. It is not just getting words and ideas down on paper—that is just the first step. It is the organizing of these words and ideas into sentences and the sentences into paragraphs. That is the process we call writing.

All right. So you have gotten some ideas on paper, and you have roughed them into the form of sentences and paragraphs. How do you arrange these paragraphs into a larger form? Let us take a look at the most typical form expository prose takes. Again, we are talking about eighty to ninety percent of effective expository writing—writing which explains or persuades. First, the opening paragraph. This paragraph is often the most difficult to write, and when you start out to write something, I suggest that you *not* begin with the opening paragraph. Too much writing gets bogged down at this point because frankly when most of us start out to write, we do not know what we want to say until we have said it! You can talk about outlining all you like—and if it helps you, fine; use it—but I need to sit down and start writing, whatever comes into my head and in whatever order it comes. Only then do my ideas become clear. After I have written enough to see where I am going, then I go back and write the opening paragraph.

Exercises (034):

1. **Discuss the length of a good paragraph.**
2. **Discuss the function of various sentences in a paragraph.**

THESIS SENTENCE

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035. Discuss the organization of a written paper.

The first paragraph of most expository prose is inverted from the usual order. The topic sentence comes at the end of the paragraph instead of at the beginning, and we usually call it the thesis or thesis sentence. The thesis sentence is the most succinct statement you can make of exactly what you want to prove or get across. It should be as narrow as possible, not merely a general subject but the single, specific point your writing wants to demonstrate. This sentence is extremely hard to write, and you may not be able to state it fully until everything else is finished. It is hard to write a good thesis sentence, but *hard writing makes easy reading.* The sentences which preceed the thesis sentence should establish some rapport between you and the reader—lay out the ground rules, as it were. But the thesis sentence is a call to do battle: it is your commitment to a position you are prepared to defend.

Then in the rest of your discussion, set forth the evidence, perhaps one major point to a paragraph, perhaps several paragraphs for each major point, each paragraph written in model paragraph style, each supporting of amplifying the thesis. Maybe you have three main points in the body of your argument, or two, or four, or five. If you have more than five points (and fewer are probably better), you should consider subdividing your argument, or look for ways to subordinate some points under more general headings. Finally, when the argument has been proven, you conclude.

The conclusion, though, is not simply a restatement or summary of what has gone before. It should not merely repeat the thesis. If you have done your job properly in subjecting the thesis to a thorough process of support and demonstration, then the thesis should be somehow transformed. This is a magic process which is very hard to explain, and it is usually something you feel. The whole process arises from thinking hard and thinking clearly.[6] If you have really thought through the implications of your thesis, at the conclusion the thesis can be expressed as a genuine new synthesis. So try to avoid a lazy mechanical summary. By the time the reader has gotten to this point, he should be so convinced by your argument that his world is transformed and he doesn't ever see it the same again. This is the exciting thing about good expository writing.

Now maybe writing seems like a kind of mechanical process to you, the way I have described it—mechanically putting subject/verb/object together, mechanically writing topic sentences and model paragraphs, mechanically writing a thesis and demonstrating it fully, mechanically writing a conclusion of genuine synthesis—but this is the process we call writing, and it is hard work. *Hard writing makes easy reading.* The best writing always exhibits this structure or one similar to it. It is possible to do it differently, but this is the easiest way, and most people use this structure. Look around you. Try analyzing, for instance, James Reston's column in the *New York Times* keeping this simple pattern in mind. Nine times out of ten this is the pattern Reston uses. Try analyzing a feature article in *Time* or *Newsweek*—I say a feature article because straight news is written differently. Or look at an essay in *Foreign Affairs* or *Psychology Today* or even *Motor Trend*—most expository writing which really communicates is strictly organized. It may be conversational, but it has structure.

We have been concerned largely with what to *do*, not what *not* to do. Here is one difference from Miss Klutz, who spent most of her time saying things like, "Do not end a sentence with a preposition" or "Do not split infinitives." We say that she was prescriptive; she prescribed what *not* to do when she should have been helping us with what to *do*. I think of my work with cadets at the Air Force Academy as a kind of confidence course—to encourage them, and you, to have the confidence to think clearly, because then clear and correct writing invariably follows. Never force yourself to write. If you are not ready to write, it is because you do not know enough about your subject or have not thought through sufficiently what you want to say. When you are

ready to write, the words come out easily and spontaneously. A first draft often comes to me in the middle of the night, after I have had a few hours sleep, especially if I have been reading or thinking about the topic beforehand. Dr. Johnson said, "A man can write anywhere, anytime, if he will"—and that is true—except there is another rule that goes along with that one: "Thinking always preceeds writing."

Now I am not saying that there was not some good in old Miss Klutz, and that the do's and don'ts—what we call usage—are not important. Air Force writing is correct writing, and even if it is conversational, it keeps a dignified tone. Dignified, remember, but not self-important. We are not allowed to write everyone's favorite four letter word in an Air Force letter, just as the *New York Times* does not print it, and I would not be allowed to say it from this platform. Chances are you have little or no trouble with usage: the American English you speak is probably correct enough for most Air Force purposes. But if your boss is a real stickler or if you want to settle the office argument, I recommend *A Dictionary of Contemporary American Usage* by Bergen and Cornelia Evans. I have used the book for years, and its sensible, unpretentious approach rarely fails me. There is also a short usage section in the *Guide for Air Force Writing*. And for help with punctuation, all the rules are probably summarized in your desk dictionary.

Finally, let me leave you with this thought, which comes from a great British civil servant, Sir Ernest Gowers: To Be Clear is Efficient; Not To Be Clear is Inefficient.[7] I'm going to paraphrase that in terms of the Air Force and say, To Be Clear is Professional; Not To Be Clear is Unprofessional. And remember that like the lecture, writing is also pre-Gutenberg. Think about it!

Exercises (035):

1. **Explain what a thesis statement is.**

2. **Discuss the conclusion of a paper.**

Notes

[1]Alexander Gerchenkron, *The New York Times*, 19 June 1975, p. 23.

[2]Major H. A. Staley and Lt Col G. V. Zimmerman, Jr., *The Tongue and Quill: Communicating to Manage in Tomorrow's Air Force*, Air Command and Staff College, 1975, p. 24.

[3]Some of the words in this list are also found in *Tongue and Quill*, p. 24. For a more complete list of self-important words, see Rudolph Flesch, *The ABC of Style: A Guide to Plain English* (New York: Harper & Row, 1964).

[4]Quoted in *The New York Times*, 20 June 1975, p. 31.

[5]See Rudolph Flesch, *The Art of Readable Writing* (New York: Harper & Brothers, 1949), p. 116.

[6]On the importance of clear thinking in the writing process, see Major James Conely, "A Little Thought Prevents Big Waste: Some Suggestions for Clear Writing," *Air University Review*, May-June 1973.

[7]Sir Ernest Gowers, *The Complete Plain Words* (London: Her Majesty's Stationery Office, 1954), p. 2.

SOME HINTS FOR EFFECTIVE WRITING

Be conversational; write as you speak.

If you wouldn't say it, don't write it.

Avoid self-importance.

Break the thesaurus habit by checking synonyms in the dictionary.

Always prefer the simple word to the complex, if it will express your meaning as well.

Keep subject/verb/object as close together in a sentence as possible.

Check the agreement of every subject and its predicate of every pronoun and its antecedent.

Avoid the passive voice.

Try for an average of eighteen words per sentence.

Write mature paragraphs using model paragraph structure.

Avoid a lazy mechanical summary.

Think before you write.

Remember: Hard writing makes easy reading.

To be clear is efficient;

Not to be clear is inefficient.

To be clear is professional;

Not to be clear is unprofessional.

USE THE RIGHT WORDS

OF ALL the tools the writer uses to communicate with others, words are the most basic. Choose the right words to express a meaning; it is not complete until your reader has understood. Words are symbols of meaning, but unfortunately you can't be sure that the meaning you give to a word will be the same as the meaning your reader will receive, your choice of words can be an obstacle between you and your reader. What can you do to prevent possible misunderstanding? The following guidance is helpful.

Before you can become an effective writer or editor, you must know something about the language you use. You use language for two purposes: to think and to communicate. First, you think in words; later you translate these thoughts into a different pattern of words for your reader. When you *think* with words, you think with words stored in your own head. When you *communicate*, you have to use words in somebody else's head. The words you use must have meaning for the reader.

EXPERIENCE AND MEANING

036. Explain why effective communication is so difficult.

Do words actually convey meaning? Many people believe that words transfer meaning in the same way that a truck transfers materiel. We load a truck with equipment, drive to our destination, and unload it. We unload exactly the same equipment that we originally put on the truck. Words, however, do not operate in this simple way. Words rarely transfer precisely the same meaning from communicator to receptor, from writer to reader. To fully understand why this is so, we must look at the way we learn words.

A word doesn't enter the mind in isolation. It normally comes to us as a part of an experience of some kind. For example, as we are watching air maneuvers, we might exclaim, "Look at that B-52." In this experience, both the term "B-52" and the thing to which it refers, the actual aircraft, are present together. And as we experience more situations in which the word and the thing to which it refers occur together, the two become associated with each other.

This is the point where we have difficulty in communicating word meanings. Since two persons seldom go through the same set of experiences, the meaning in your mind seldom coincides exactly with the meaning in another's mind. For example, the average citizen may not know that a B-52 is an aircraft.

Words don't really "transfer" meaning at all. Words, both spoken and written, are merely stimuli that the communicator sets forth. As stimuli they arouse a response of some kind in the nervous system of the receptor's past experience with the words and the things to which they refer. In other words, his or her experience gives the words their meaning.

One of the greatest single barriers to effective communication is the lack of a common core of experience between writer and reader or speaker and listener. Communication is more difficult when people have not had similar physical, mental, or emotional experiences. This means that before your words can communicate meaning, the reader must have had some experience with the objects or concepts to which those words refer. Your language must be within the reader's scope of experience.

How can you be sure a reader will understand the meaning of a word that you want to use? Unfortunately, you have no way of knowing for sure. But there are several things you can do to clarify your meaning.

Exercises (036):

1. **Why is the use of precise words so important yet so difficult?**
2. **Explain the problems that must be overcome when communicating.**

Reprinted from AFP 13-2, *Guide for Air Force Writing*, Washington, DC: Department of the Air Force, 1 November 1973, pp. 45-57.

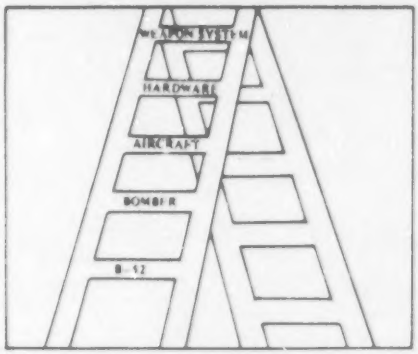

Figure 5-1. Abstraction ladder.

AVOID ABSTRACT WORDS

037. Give examples of types of words to be avoided and explain why.

Since many words in the English language have several meanings, the reader defines a word according to his or her own experience. Consequently, even though you define your terms, you can't force the reader to use your definition; he or she is quite likely to use his or her own definition. But you can narrow and control the image produced in the mind of the reader by using concrete, specific words as often as possible.

Concrete words refer to objects of immediate human experience for a large number of individuals. Abstract words, on the other hand, stand for ideas so far removed from direct experience that we cannot form a precise mental image of those ideas; they do not represent objects which the reader can see, hear, touch, taste, or smell.

Some language experts describe words in terms of an abstraction ladder. The lower rungs of the ladder represent the concrete terms for which the reader can readily identify the reference. As you go up the ladder, each word becomes more abstract than the one below it. At the same time the reference becomes more vague and therefore open to debate. For example: The term *weapon system* has a very broad meaning in the Air Force, including hardware, people, and services. The accompanying illustration shows how the hardware aspect of this term is broken down on the abstraction ladder (fig. 5-1).

Abstract words are necessary and useful. They are convenient symbols that summarize vast areas of experience. But although abstractions are convenient, they often lead to misunderstanding because they are not likely to evoke in your reader's mind the same experience items that you intend. The reader has no way of knowing what specific experiences are included in your abstraction.

Sometimes we use abstract terms, such as "proper measures" and "corrective action," that often fail to convey the writer's intent. You may write that "the solution to low morale and poor discipline lies in good leadership," and you and your reader may be caught up in a rosy glow. But until you point out some specific human experiences meant by "low morale" and "poor discipline" and some concrete behavior meant by "good leadership," neither you nor your reader can actually tackle the problem.

You should tie abstracts to specific experiences with examples and illustrations. Better still, reduce or lower your level of abstraction by using concrete, specific words as much as possible. Abstract words increase reading difficulty; concrete words improve readability.

AVOID WASTEFUL WORDS

Words or phrases may be simple or complex. Simple words or phrases communicate immediately; complex ones may obscure the meaning or confuse your writing, and add to the time and effort required in reading. Words or phrases may also be labeled as trite or fresh. They become trite because they have been so overworked that they have become stale; fresh ones, although in ordinary use, attract your reader because of their simplicity. Trite words and phrases go with indirect, third-person writing. It is hard to have one without the other. If you write in a direct style, you are more likely to avoid trite expressions; but if you write indirectly, these wasteful words probably fill your work.

Traditionally, military writers have used a very difficult style of writing. Trite, wasteful words and phrases loaded it down, and overuse of the third person and the indirect approach prevailed. Frequently, writing that did not conform to that pattern was rejected because it seemed to lack the proper dignity. Military writers had the idea that this was the way they were expected to write. Their need to conform caused them to pick up these bad habits, use them, and pass them to the people who followed.

We have progressed somewhat toward more efficient communication during the last few years, but we are still plagued with some bad habits which may be difficult to break. But we can break them if we consciously use fresh, simple words in everything we write. Look at these examples of wasteful words:

INSTEAD OF THIS	TRY THIS
Afford an opportunity	Allow
Are desirous of	Want to
Experience has indicated that	(Usually deadhead)*
Gained from the following source	from
In a manner similar to	Like
In compliance with orders of a commander	(Usually deadhead)*
In accordance with instructions from	(Usually deadhead)*
It is recommended that consideration be given to	We recommend that you consider
Is responsible for selecting	Selects
In a situation in which	When
Makes provisions for	Provides for

On his own initiative	(Usually deadhead)*
Takes appropriate measures	Acts; does
The fullest possible extent	The most
This headquarters is cognizant of	We know
With due regard for	For

*A deadhead is a useless word.

Many examples like these can be found in Government writing. For example, a weather manual reads:

> Weather is always present and, to a varying degree, is a continuing factor in the conduct of any military action. Its effects are so numerous and widely varied that they can be properly evaluated only when treated within their relationship to all other factors contributing to the manner of conducting specific operations. This becomes particularly manifest in the application of weather forecasts to planned or contemplated operations. Any operation, therefore, the conduct of which might be affected by weather conditions, demands a proper consideration of a reliable forecast to cover the action and appropriate adjustments in plans necessitated by the weather forecast if effective conduct is to be assured.

Have you had enough of this kind of writing? So have a lot of other people.

The following rewrite of the one above makes one point: More readers would have understood the main idea more quickly—and more easily—if the writer had simply said:

> When you plan a military operation, consult a weather forecast.

If the writer of the original paragraph had thought through the material, he or she might have been able to write more clearly. There's no use even trying to write if your ideas aren't clear. A general once wrote across the top of a staff study report the word: "Rethink." What he meant was: rethink, rewrite, and resubmit.

Direct, concise writing takes less time than using the timeworn phrases and constructions you have just read, and it makes your finished product communicate with vitality and freshness.

Direct, concise writing appeals to readers much more than that which is full of trite expressions, spacefilling phrases, and mechanical repetition of ideas. Look at this sentence:

> It is felt that in the future, airmen, during their basic training period, should have indoctrination lectures on all the technical and nontechnical schools in the Air Force.

Now change it: cut out the trite lead-in and other wasteful words:

> During basic training, airmen should have indoctrination lectures on all Air Force Schools.

In almost all instances, you can cut out such lead-ins, and no one can deny the improved results. And in this example we have further improved it by eliminating other unnecessary words. But if you can't cut the lead-ins completely, or if you feel you need some qualifying statement, look at this example:

> *It is considered probable* that an officer will find promotions coming faster if he or she attends service schools rather than ignoring the opportunities.

Then change it to read like this:

> Promotions *probably* will be faster for the officer if he or she attends service schools.

Notice that the second is much more direct than the first. Train yourself to write this way, and chances are that you will note a marked improvement in interest and readability.

AVOID DEADHEADS

In railroading, a *deadhead* is a passenger who occupies a seat but pays no fare, who takes up space in the train and gives nothing in return. Similarly, a deadhead word takes up space in the sentence and blunts the meaning of the other words. In the following sentence, the italicized words are deadheads:

> The adverse effect of the personnel "hump" *situation concerning the matter* of morale was considered.

You can tell that words are deadheads if no meaning is lost when they are left out:

> We considered the adverse effect of the personnel "hump" on morale.

One of the most common deadheads is the word "condition" in descriptions of weather—as in these examples:

> Bad weather *conditions* prevented our takeoff.
> Good weather *conditions* prevailed throughout the flight.

Here is an example filled with deadheads:

> *In the case* of the habitual offender, *there is nothing to do* but remove him or her from the service. *Needless to say*, he or she is *what might be termed* ineffectual as an officer.

Note the change:

> Remove the habitual offender from the service. He or she is not an effective officer.

Certain words or phrases are usually deadheads:

Appropriate action. *Appropriate* is a deadhead in the following sentence. *Take appropriate action to move your unit to the new area.* It means the same if you say *take action*, but this whole phrase is a deadhead and the sentence is better without it: *Move your unit to the new area.*

Take steps. Telling someone to "take steps" to do something means literally that he or she should only *prepare* to do it. If you intend that the reader prepare to do something but not actually do it until you give further instructions, say so. If you want the reader to do the thing, tell him to do it and omit reference to the steps.

In case. *In the case of* and *in the matter of* are usually deadheads. *In the case of Captain Burr's accident, a report*

will be made to the safety officer. Better, but passive: *Captain Burr's accident will be reported to the safety officer.* Still better, because it is in the active voice: *Report Captain Burr's accident to the safety officer.*

There are many other empty phrases that you can omit without the slightest loss, such as: *wish to take this opportunity, wish to state,* and *for the information and guidance of all concerned.* The following examples show how to improve writing by cutting out the deadheads:

I wish to take this opportunity to express my appreciation for your assistance. Better: *Thank you for your help.*

I wish to state that in my opinion the runway is not sufficiently long for aircraft of this type. Better: *I believe the runway is too short for a C-141.*

AVOID SMOTHERED VERBS

To communicate, you must communicate thoughts and relationships between thoughts. A verb is a relation-showing word. A *smothered verb,* then, is one that is not allowed to show a relationship.

Let's briefly review the kinds of verbs. By definition, a verb expresses action. It also may indicate a state, a feeling, or simply existence. In the following sentences, the italicized words are verbs:

Major A *became* squadron commander and *liked* the new assignment.

He *asked* me to *write* a letter that might *help* him to *understand* what the problems *were* and how to *recognize* them.

Most of the italicized verbs in the foregoing sentences express action. *Became,* however, specifies a state; *liked,* a feeling; *were,* existence. The combinations starting with *to* are infinitives. For our purpose, just remember that an infinitive is a useful form of verb.

A verb is smothered when it is buried inside another word. Some of the smothered verbs are italicized in the following sentence:

It has been pointed out that, in the Air Force, careful *initial selection* and *classification* are important *procedures in eliminating* potentially maladjusted personnel.

Each of the italicized verbs, because it is buried in another word, has lost its power to state a clear relationship. You can restore the power of the verb by linking a thought to it.

The first smothered verb in the sentence quoted above is *select,* buried in selection. It prompts this question: Who selects what? To answers that question creates this thought: The Air Force selects people to come into the Air Force.

The next smothered verb is *classify* buried in *classification.* Who classifies what? The answer should go something like this: The Air Force classifies people already in the Air Force.

The next smothered verb is *proceed* hidden in *procedure.* Who proceeds? What proceeds? The best answer is: Selection proceeds and classification proceeds. However, that doesn't make sense, and you can see that *procedures* is a deadhead. Prove that point by writing the original sentence without it.

One more smothered verb remains—*eliminate* in *eliminating.* Who eliminates what? The Air Force discharges people who may turn out to be maladjusted.

What we have done so far with the questions and answers should have stirred up your thinking. As you answered the questions, you linked thoughts and relationships. So you now express the thought patterns your answers provided this way:

If the Air Force selects and classifies personnel carefully, it will have few maladjusted people.

Step by step, testing for smothered verbs may seem tedious; however, in actual practice it is faster and simpler than you might think: just frame questions and then answer them.

AVOID UNFAMILIAR WORDS

An extensive vocabulary is a fine asset. It enables you to grasp quickly the thoughts tossed at you, but it may not help you to put your ideas across to someone with a smaller or different stock of words. The most important rule to remember about words is this: *Base your writing on the vocabulary of your readers.* A word may be precisely correct and still be undesirable if your audience finds it hard to read. When the reader encounters an unfamiliar word, communication stops while he or she backs up for another look. When this happens often, reading is hard and slow.

Use words that are short, easy, and common; avoid words that may stop the reader. These words found in current directives are typical *stoppers* that add to the reader's difficulty in getting the message:

disseminate	implement
commensurate	promulgate
utilization	feasible

Using words of one or two syllables is not the whole answer; sometimes even these are not common words. Even though all the words are short, many readers do not get the meaning of the statement.

The id is never quiet.

Also avoid technical words if your reader does not have a technical background. At times technical words are necessary. They are shortcuts to communication when both you and your reader are specialists in the same area. But these words become blocks to understanding when you are writing to someone outside your specialty. For example, many readers would not know that you were describing a vacuum tube if you wrote:

A triode consists of a plate, a grid, and a cathode.

Similarly, avoid using Air Force, military, government, or professional jargon if your reader may not

understand it. Also avoid using foreign words or phrases that are not commonly known and understood.

AVOID UNNECESSARY TECHNICAL NICETIES

Don't use fine distinctions in words when they are not needed. Writers often spend time quibbling about technical niceties that have no real meaning for the reader. One writer started out to explain what he considered to be the essential difference between a *commander* and a *military manager*. At the latest report, he has been on the project a year and has succeeded in satisfying nobody.

We have looked at some of the things that we should avoid in writing; now, let's look at some things we should do to write clearly, simply, and directly.

Exercises (037):

1. **Discuss the problems experienced by those who use abstract words.**
2. **Explain the impact of wasteful words on communication.**
3. **What are deadhead words, and why should their use be avoided?**
4. **What is a smothered verb, and how does it affect communication?**
5. **Why should unfamiliar words and unnecessary technical niceties be avoided?**

WRITE TO THE PERSON

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038. Explain how to write more effectively.

Your reader wants to know: What does this mean to me? He or she should get the answer quickly, and must feel that this information relates to his or her own needs and problems.

You give this impression if you write directly to the reader. Such words as *I, you,* and *we* help to establish a personal link between you and your reader.

Using the personal approach also leads to greater clarity and accuracy. If you are writing directions to a line mechanic and say, "The ignition switch should be positioned to OFF before any work is performed on the ignition system," the mechanic may think that someone else will do the task. But if you say, "Before you do any work on the ignition system, be sure that the ignition switch is OFF," the reader knows unmistakably that he or she is responsible.

However, overuse of personal pronouns can hurt your writing. Don't apply them too liberally in sentences which then convey ridiculous impressions. For example, note how the writer in the following sentence overworked the personal pronoun *your*.

> Before starting your engine, check *your* battery switches ON, *your* mainline switch ON, *your* ignition switch OFF, ...

The engine, the battery switches, the mainline switch, and the ignition switch, of course, do not belong to "you." Instead the sentence should read:

> Before you start the aircraft engine, check the battery switches ON, the mainline switch ON, the ignition switch OFF, etc.

USE PLAIN TALK

If your writing is vague, general, or too scholarly, your reader is likely to ask, "Who's this guy writing for, anyway? Me? Seems more like he's trying to impress somebody," or "It's a lot of reading, but I don't get it."

Remember this: *It doesn't matter how well you know your subject or how thoroughly you investigate it, if your reader does not get the meaning, you have wasted all your efforts.* The reader has no way of knowing what you know or how well you know it unless you transmit your facts so that he or she can grasp them.

Talk directly to the reader. Bring him into the discussion. Use active verbs of motion and concrete words the reader knows. Use the personal pronouns "we" and "you," *but with discretion.* Make the reader a part of what you are writing just as though you were both in a room and you were describing a piece of equipment or explaining a technique. Explain facts and procedures in terms the reader can understand. Use specific instances and simple presentations of steps, and have him or her seemingly participate in whatever is happening on the printed page. An appealing style lends itself readily to interest-catching devices and a direct approach to the reader. A lively, readable style is an arrangement of words, sentences, and paragraphs into an overall composition that is appealing, informative, direct, and clear at first reading.

Exercises (038):

1. **Explain what is meant by plain talk in writing, and ways to insure we use plain talk when writing.**
2. **Why should personal pronouns be used when writing?**

Checklist

HAVE YOU USED THE RIGHT WORDS?

Have you:

1. Used concrete, specific words instead of abstract ones?
2. Used simple words and phrases rather than complex ones?
3. Used fresh words and phrases rather than trite, overworked ones?
4. Cut all deadheads and other wasteful words?
5. Avoided smothered verbs?
6. Avoided using words that might be unfamiliar to your reader?
7. Avoided unnecessary technical niceties?
8. Written personally to the reader?
9. Used plain talk?

Reading 3

SENTENCE CONTROL: SOLVING AN OLD PROBLEM

by

Paul Richards
Writing Consultant to Industry

THE BLUNT note at the top of the report told a familiar story.

"The next person who writes a report this wordy can type it himself, read it to himself, and take it with him when he looks for a new job."

The department head was fed up with reports whose meaning was buried in pages of word silt.

When the author came to me for help, the source of his problem was obvious. The sentences in his report averaged 26 words. In this, they weren't too unusual.

As an industrial writing consultant, I find that most business writers who flounder on paper do so by first losing control of their sentences. Reports and memos I see typically turn up sentence averages of 24 to 26 words; many average near 30. And the more profound the authors want to appear, the longer their sentences.

Most business writers don't realize that good professional writing averages roughly 17 to 20 words a sentence. That's true of *Newsweek*, *Time*, and *The Wall Street Journal*, as well as the works of writers like Michener, Steinbeck, and Hemingway.

In countering the mistaken belief that wordiness equals wisdom, I've found that students improve quickly by keeping four rather simple guidelines in mind.

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039. Explain how to control your sentences.

TEND TOWARD SHORTER SENTENCES

From childhood, most of us are taught to capture at least one complete idea—or thought—in each sentence. But ideas and thoughts have no dimension, and that's where the trouble starts. Writers are tempted to include too many parts of an idea in one sentence. Such sentences often become freight trains, carrying an overload of implications and qualifiers, frequently shunting off on side-tracks or advancing to their destination only very slowly. As a result, they can hardly be read—let alone understood.

To express clearly their ideas, writers should divide them into individual parts. This doesn't mean pulverizing them so finely their whole outline disappears. It means looking for logical dividing lines, then fitting the parts together in progressive, faster-moving sentences.

For example, this 58-word sentence—taken from a company memo to employees about their stock plan—holds every scrap of information the author felt was needed, but even a doctorate student would have to labor to understand it.

> All these comments concerning the federal income tax treatment are based on present statutes, and it should be understood that in the future statutory modifications may be made, either in the laws themselves or in their respective interpretations, which will modify that tax treatment or the requirements needed to be in compliance with the applicable statutes.

Divide this blockbuster into smaller bits, and look what happens.

> These comments about the federal income tax treatment are based on the present law. But the law could change or be interpreted differently in the future. If that happens, your tax treatment or the requirements to satisfy the law will likely change too.

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These three simpler sentences—averaging 14 words each—make the idea much easier to grasp. And in 15 fewer words.

Why does dividing and shortening help? Mainly because most ideas aren't simple and short; they are often quite complex with many dimensions. This is especially true of our own ideas, since we formed and developed them and thus have special thoughts about what they reveal. So when we try to explain them in writing, we're often tempted to convey their every facet at once, to forestall the reader's misunderstanding them.

But our reader begins by knowing little or nothing about our ideas, so we have to *build* carefully his or her understanding. If we try to push the reader from zero to full enlightenment in one sentence, we rarely succeed. The clarity we're striving for often gets lost in a cloud of commas, clauses, and conjunctions.

Here's another example where the author started with a large idea, didn't break it down, and built a runaway sentence. If he'd thought to divide his 53-word monster, it could have been tamed into a much clearer series of shorter sentences.

The subject is employee benefit plans:

> Plan participants may obtain additional copies of the following summary annual report for a reasonable charge, or inspect without charge the latest full annual report or any parts of the report, including a list of any assets held for investment and a list of transactions involving more than 3 percent of plan assets.

Now let's look at the edited version:

> For a small charge, plan members can get copies of this summary report from the benefits office or the administrator. Or they can inspect the full report free at the benefits office. The full report lists assets held for investing, and transactions involving more than 3 percent of plan assets.

Note the edited version uses fewer words than the original, yet delivers more information, and does so in a tone that could offend no one's intelligence.

KEEP YOUR SENTENCES IN THE 17 TO 20 AVERAGE WORD RANGE

Wait before you brand this guideline as too mechanical or simplistic. It works, and it passes the most rigorous intellectual test. No information is so complex or abstruse that it can't be clearly conveyed in sentences averaging around this range.

For insight on this, analyze the work of good professional writers—especially those popular with a wide audience. You'll find the most successful among them adhere to this technique. Of course, they don't do it by counting words but rather through experience or innate story-telling skill.

If you feel this will lead you into a "See Dick run" sort of simplicity, look at this passage from *Henderson the Rain King* by the Nobel Prize-winning novelist Sual Bellow. It starts off with an 83-word sentence, but the subsequent four sentences bring the overall sentence average down to 21 words.

> We were seated face to face on a pair of low stools within the thatched hut, which gave the effect of a big sewing basket; and everything that had happened to me—the long trek, hearing zebras at night, the sun moving up and down like a musical note, the color of Africa, and the cattle and the mourners, and the yellow cistern water and the frogs, had worked so on my mind and feelings that everything was balanced very delicately inside. Not to say precariously.
>
> "Prince," I said, "what's coming off here?"
>
> "When stranger guest comes we always make acquaintance by wrestle. Invariable."

The next five sentences lower the average further:

> "That seems like quite a rule," I said, very hesitant. "Well, I wonder, can't you waive it once, or wait a while, as I am completely tuckered out?"
>
> "Oh, no," he said. "New arrival got to wrestle. Always."

With that, the ten-sentence average is down to 15 words. The first sentence is a well-written *long* sentence, using simple, concrete words. Then the length pattern of the subsequent sentences, 4—7—10—1—10—18—4—5—1, quickly brings the writing back into the easy reading range.

But that's fiction, you might say. It makes no difference; the rule applies equally to both fiction and nonfiction. Good writing of any kind establishes close idea contact with readers—and that's best done if they can readily understand you.

Consider the wartime speeches of Winston Churchill. They were meant to inform, to persuade, to motivate—exactly the aims of most business writing. Studying them reveals that many of Churchill's most compelling and memorable sentences were *under* 20 words long.

> Never in the field of human conflict was so much owed by so many to so few [17].
>
> Give us the tools and we will finish the job [10].
>
> We shall fight on the beaches [6]; we shall fight on the landing grounds [7]; we shall fight in the fields and in the streets [10]; we shall fight in the hills [6]. We shall never surrender [4].

The stationery Churchill reserved for urgent orders contained the terse headline: "Action today." What if this had been written: "It is recommended that implementation of the instructions contained in this document be commenced and, if possible, completed before the conclusion of the current business day." Would that have been more impressive? More urgent? Clearer? Hardly.

Unpracticed writers persist in the notion that length equals depth. But skilled professionals know that readers get exhausted wading through lengthy syntax; they're neither impressed nor motivated, they're just fatigued.

VARY YOUR SENTENCE LENGTHS

Keep in mind that the 17-to-20 rule deals with *average* sentence length, not the length of each individual

sentence. Your sentences can, and should, vary greatly in length—so long as they fall in the readable range, *on the average*.

Clarity does not rule out well-written long sentences. Ernest Hemingway was considered a powerful "short sentence" writer. Yet two facing pages in *For Whom the Bell Tolls* contain sentences of 153, 74, 67, and 60 words. Despite these, the *average* length of all sentences on those two pages is 21 words.

To achieve that, Hemingway mixed sentences of differing lengths, framing several under ten words and some as short as one or two. You should do the same. This practice automatically gives writing *variety*—a key to catching and keeping reader interest. Make no mistake, it doesn't prop up weak content. But it does infuse strong content with vitality, the essence of good writing.

Unvarying sentence length (as when *all* sentences fall in the 17-to-20 word band) steals power from even good material by building up an annoying sing-song cadence that calls attention to itself and away from your message.

This report from a business traveler holds valuable information, but it just lies there. (To get the full effect, read it at your normal reading speed.)

> In Phoenix I visited several outlets for our industrial line. These visits were arranged by our local area sales representative. He had explained various areas where each needed merchandising help. At the first, I detailed our new volume discount program. The sales manager was interested but expressed several key doubts. He said his business was composed mostly of small buyers. Their individual purchases were too small to generate much discount. He asked if he could consolidate account purchases into groups. I told him this wasn't currently part of the plan. But I said I'd check with you for an answer.

Simple, clear, and direct, but also choppy, dull, and uninspiring. Imagine it going on for another two or three pages. But vary the sentence lengths, and it comes to life.

> In Phoenix I visited several outlets for our industrial line. Our local area sales rep had arranged the visits and explained what merchandising help each dealer needed. At the first, I detailed our new volume discount program to the sales manager who was interested but had several key doubts. Most important, he said his customers were primarily small buyers whose individual purchases couldn't generate much discount. He asked if he could consolidate account purchases into groups, even though that's not part of the present plan. I said I'd check with you for an answer.

This sentence pattern of 10—17—22—17—19—9 averages 15.3, delivers the message in six fewer words, and, above all, starts speaking with force.

(I obviously engineered the word count in the first memo to make the contrast clear. But the point is equally valid in less flagrant cases.)

Exercises (039):

1. **Discuss the reasons why short, concise sentences are more effective.**
2. **Explain the effect that long sentences have on readers.**
3. **Discuss the dangers of *not* varying the length of your sentences.**
4. **Explain how sentence length affects reader interest.**

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040. Discuss punctuation as an integral part of effective sentences.

INCREASE THE VARIETY OF YOUR PUNCTUATION

Of all the declarative writing tools, the most overlooked—and awkwardly used—is punctuation. This probably stems from the baseless belief that punctuation is governed by inflexible rules that only trained grammarians understand. Many writers feel it's safer to use minimum punctuation than risk breaking a rule.

What a waste! Punctuation needn't be complicated or awesome. Writers with even a basic feel for the liveliness of language can easily learn to punctuate with a sure hand. And doing so adds a dimension of vitality to writing that can be gained no other way. Good punctuation imbues an unvarying flow of written words with the vigor and urgency of spoken language. It yields freshness; it gives pace and tone; it makes written ideas more compelling to readers.

Most significant: Good punctuation enhances the clarity of even the longest sentences.

In developing this touch, take heart from knowing that writers like Shakespeare, Milton, and Shelley had no consistent pattern of punctuating. Poet E. E. Cummings even eliminated capital letters. Lincoln changed punctuation between drafts of the Gettysburg Address (even *after* he'd given it), obviously seeking the right *effect*, not the right "rule."

So if you differ from the purist in some usage, who cares? The resulting vigor of your writing will more than offset the small (and largely imagined) risk you take.

A little classifying may help in your use of punctuation. These classes are not absolute or even complete, but they're a good memory guide.

Timing and pace. These are the main tasks of the period, semicolon, and comma. Think of them in a musical sense.

A period equals a full rest (between sentences): Tomorrow is Saturday. I thought it would never get here.

A semicolon equals a half rest (between independent clauses): Smoking is not a virtue; it's a very expensive vice.

A comma equals a quarter rest (any time you need one): All things considered, we should postpone our decision on the building.

To use these well, learn to appreciate the value of pace and timing in writing. With a little effort, you can quickly develop an adequate sense of where pauses should occur

and how long they should be. Then, just use the right marks to get them. If that sounds rather subjective, it's intended to. Writers invented punctuation so they could enliven their writing with the varied movement and flow *they* wanted; and that's still your best guide to using it.

Emphasis. Where word alignment alone can't adequately turn your volume up or down, punctuation can.

Use an exclamation point for loudest volume (but only after a short declarative sentence): This must never happen again!

Emphasize important words *within* a sentence by underlining: He has been bankrupt *four* times.

Draw attention to an important aspect of a larger idea you're expressing by isolating it with dashes: The third objective of this program—and by far the most important—is to reduce attrition.

The colon serves a similar purpose, in two uses.

First, to introduce a list: The subjects of the three operator seminars will be: job safety, product quality, and labor turnover.

Second, as an emphasizing link between an important point and an introductory statement that precedes it: Most important: We must guarantee on-time delivery.

Parentheses turn the volume *down* on a thought that departs from your main message. They tell your reader that this information isn't really essential, but it may be useful: This new model calculator (the fourth we've introduced this year) can perform more functions than any other in its size and price range.

Tone. Two punctuation marks can affect this—the question mark and quotation marks.

Questions can often add a friendly, human tone to your writing. For example, in these sentences, contrast the chill of the first with the warmth of the second: If we're to process the claim you recently submitted, you have to send us more information. Can you help us process your current claim by providing some additional information?

Questions are also useful transition devices. For example: We've set an ambitious production goal for next year. How do we reach it? By hiring qualified people and training them well.

Quotation marks not only set off direct quotes; they can also denote words or phrases used in a special sense: The draft of my manuscript was returned by our attorneys with several "corrections."

Punctuation used well (which includes not using it to the point it becomes conspicuous) can vitalize your writing while keeping your sentences from running out of control.

By keeping these four guidelines in mind as you develop your reports, letters, and memos, you'll reap an important benefit—easier readability. Readable sentences (an endangered species in much business and government writing today) are also apt to be clearer. And clarity yields good communication!

Exercises (040):

1. **Explain the average writer's reaction to punctuation.**
2. **Discuss the ways in which punctuation can be used to make your sentences more dynamic.**
3. **Summarize the various ways of emphasizing important words or ideas in your writing.**

HOW TO WRITE EFFECTIVE PARAGRAPHS

IF YOU HAVE clearly thought out what you want to write, the result is most apparent in your paragraphs, for a paragraph represents a stage in your thinking process. Each one is the full development of one of the ideas you considered as you organized your thoughts; together, your paragraphs should lead your reader clearly and smoothly through your line of thought.

We present each idea and support it in a paragraph. In a short letter, we may have only as many paragraphs as we have main ideas. In a longer writing job, we may present each main idea in a paragraph and then use another paragraph for each supporting point. Each paragraph should show the breakdown of our ideas.

Just as we organized words into effective sentences, so we organize our sentences into effective paragraphs. But there is a difference. We organize sentences according to certain rules of grammar or word order, usually S-V-O, but we haven't a lot of rules for constructing a paragraph. So long as a paragraph treats only one idea, it may be organized and written in any number of ways. However, if we follow some standard practices, we will write more effective paragraphs. We discuss these practices in the following paragraphs.

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041. Discuss the standard practices in writing paragraphs that allow full development of ideas.

KEEP THEM SHORT

There are no hard and fast rules for the best paragraph length, but try to keep them short. Paragraphs exist for clarity and ease of reading. They should include only as much as your reader can grasp in one swallow.

Paragraphs in popular books and magazines usually consist of three, four, or five sentences. Most paragraphs in textbooks and manuals contain four to six sentences. But, just as we said about sentences, vary the length of your paragraphs. A long series of the same size paragraphs look monotonous on a page and is monotonous to the reader. At the same time, a long series of short, two- or three-sentence paragraphs, implies that their contents are very sketchy.

So keep most of your paragraphs relatively short, but vary the length at least slightly. If you have several very short paragraphs in a row, don't be afraid to use a fairly long one after them. Or, break up a series of rather long ones with a very short paragraph. Even use a single sentence as a paragraph occasionally to emphasize one of your main ideas.

USE TOPIC SENTENCES

So your reader understands what the paragraph is about and gets the main idea, focus the material into a *topic sentence*. This sentence may introduce an idea or state in general terms the subject of the paragraph. The sentences that follow support it with facts, figures, and details.

In Air Force writing, the topic sentence is particularly important. For one thing, consciously focusing your material helps you to decide just what you want the paragraph to do. Certainly it helps your reader understand what you are trying to say. Finally, clearly stating the main idea of each paragraph helps you to write more concisely and orderly.

Though the topic sentence may appear anywhere in a paragraph, it ordinarily comes at the beginning. Occasionally, however, you may want to build up to a summary statement rather than make the statement first and then give the supporting details. Or, you may actually use it in both places—state the main idea, support it, and then clinch the argument or reemphasize the main thought introduced in the topic sentence by summarizing or restating it.

Most of the time, though, the topic sentence should be the first sentence in the paragraph. Many people reading a letter, report, or directive need only a general idea of its

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Extracted from AFP 13-2, *Guide for Air Force Writing*, Chapter 9, "Writing Sentences and Paragraphs," pp. 121-128, 1 Nov. 1973.

contents. Making the topic sentence the first sentence in the paragraph allows a reader to scan more easily. If he wants more detail, he can read the rest of the paragraph.

SELECT GOOD SUPPORT MATERIAL

The second element of a paragraph is the support material. The material proves, describes, or explains the topic sentence.

Here is your chance to obtain your reader's interest and sell your point. However, this is where most people get in trouble by being too wordy. Choose your material carefully. It should be pertinent, adequate, and interesting. Let's consider these three qualities.

Keep it pertinent. Remember that a paragraph is a unified body of material dealing with one idea. Your details, reasons, etc., must actually support this central idea.

At the same time, the supporting material must remove any doubts your reader has about the idea. It must clearly explain, describe, or prove the idea to his satisfaction.

Here are a few things to remember about choosing material which will be acceptable to your reader:

(1) *Be honest.* Don't be misleading. Don't use something as a fact unless you are sure it really is. An intelligent reader sees through dishonest support and rejects the idea just because you haven't been honest.

(2) *Consider your reader's background and intelligence.* If you have analyzed your possible reader, you know just how detailed you have to be.

(3) *Use valid support.* This isn't always as simple as it sounds. For example, how current are your statistics? Do they actually apply to this point? What was your source? Are you quoting accurately and in context? Is the person quoted really an authority on this subject?

(4) *Use meaningful support.* A particular word illustration may be valid yet not very meaningful to your reader. Things are most meaningful to the reader when they hit close to home. He wants to know, "What does this mean to me?"

Make it adequate. Be complete but don't overdo it. Stop too soon and you may raise questions in your reader's mind, but don't "beat a dead horse." Use just enough support material to convince your reader—no more.

Keep it interesting. We often lose a reader simply because he gets bored with the kind of support material we use. Try some variety. Instead of a straight recital of facts or reasons, try an illustration, true or hypothetical. Use accounts of actual happenings to bring out a point. As we have already said, support material which affects the reader or his work is more meaningful to him/her. It is also more interesting to him.

To summarize: Assuming you have thought through your ideas and organized them properly, you can win or lose a reader depending on the support material. If this material is vague, inappropriate, too wordy, or just plain not valid, you have lost the fight. But you can encourage people to read and believe what you say by being honest with them, and by using a little imagination or variation in the way you present the case.

Exercises (041):

1. **Discuss the relationship between sentence length and paragraph length.**
2. **Explain the value of topic sentences.**
3. **Summarize the qualities of good support material.**

USE TRANSITIONAL DEVICES

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042. Explain the use of transitional devices in writing paragraphs.

There is one more element needed in paragraphs—*transition.* Lead the reader smoothly and easily through your ideas. You can do this by using transitional devices to tie the thoughts of a sentence together, additionally, to tie the sentences and then the paragraphs together.

There are several ways to move from one idea to another. Repeat something, use a connecting word or phrase, or insert a whole sentence whose sole purpose is to move the reader to the next point. In long papers you may even use transition paragraphs.

Transitional words. When we use transitional words to connect ideas, we must choose words that accurately show the relationship between the thoughts or ideas we are connecting. Each of the following words establishes a definite kind of relationship: *finally, so, next, therefore, however, now.* These words may tie whole paragraphs together as well as clauses and sentences. For example, in the following sentences *however* acts as a transition:

> In previous tests, only one person in five was able to complete Part I in less than 2 hours. However, during the last examination period, three out of every five completed it within 1½ hours.

Notice that the two ideas stand apart: A gap of meaning separates them. The word *however* introduces a contrast and relates the two separate sentences.

Transitional phrases and clauses. We probably are more aware of phrases and clauses that are used as transitional devices. Here are some familiar ones: *on the other hand, because of this, in the second place, another point to consider, since this is true.* These are often found at the beginning of topic sentences.

Transitional sentences and paragraphs. Transition sentences and paragraphs are not so common as transition words, phrases, and clauses. But we do need them sometimes.

The transition sentence may be at the end of a paragraph, lead into the paragraph that follows, or it may be the first sentence in a paragraph, to tie what follows to the preceding paragraph. You have probably seen one like this: "This brings us to the next point, the transition paragraph."

Transition paragraphs may sum up a major idea and at the same time lead into the next idea. Occasionally they merely introduce the next major idea.

When to use transition. Normally we think of transitional devices being used between paragraphs because this is where they are most obvious. These devices may either tie back to the preceding paragraph or to the overall subject of the paper. And, generally, paragraphs are tied together within a major point. When we move to our next major point, we often want to tie back to our overall theme or subject.

We also use transition between the sentences in a paragraph by repeating a name or idea previously mentioned, or using a pronoun to refer to it. Or we may use some of the transitional words mentioned previously. Our reader must be able to follow the logical progression of points in our support material. If we have used our transitional devices well, we should be able to scramble the sentences of a paragraph and have someone else reassemble them just as they were originally.

The most important point about these transitional devices is—*use them.* You have thought through your ideas. Now lead your reader over this same ground. The following example contains transitional devices which bridge the gaps between ideas so that the reader doesn't get lost.

The *first* thing a writer does in preparing a regulation is to think about content in the light of the purpose of the regulation. His *next* step is to do the factual meat of the presentation. *Third*, he should prepare an outline that clearly states the topics he intends to cover. Finally, using the outline, he should write the first draft.

The following illustration shows some other words and phrases commonly used for transition.

To Do This	*Try This*
To add some ideas	and, in addition, moreover, second, a second ..., another ..., besides, also, etc.
To contrast ideas	but, yet, nevertheless, however, still, in contrast, otherwise, on the other hand, etc.
To compare ideas	likewise, similarly, just as, etc.
To show result	therefore, as a result, consequently, thus, etc.
To show time	then, a little later, immediately after, meantime, afterwards, now earlier, next, etc.

Checklist: Have You Written Effective Paragraphs?

1. Did you write short paragraphs whenever possible?
2. Do you use topic sentences?
3. Is your support material good? Is it:
   a. Pertinent?
   b. Adequate?
   c. Interesting?
4. Did you tie your paragraphs together when necessary by using:
   a. Transitional words?
   b. Transitional phrases and clauses?
   c. Transitional sentences and paragraphs?

Exercises (042):

1. Predict the effects of using transitional words, phrases, and clauses in your writing.

2. Distinguish between transitional sentences and transitional paragraphs.

3. Explain when transitions are not appropriate.

Lesson 6

COMMUNICATING IN SPEECH

Lesson Objective: Comprehend selected principles of effective speech composition and delivery.

Introduction: This lesson is designed to help you organize speaking material logically and present it forcefully. This objective arises from the practical needs of Air Force managers to explain missions and programs to subordinates, to brief superiors, to participate in staff meetings, to speak to civilian groups, to instruct and inspire other members, and to participate in Air Force conferences and joint conferences with representatives of other services or agencies. In the field, in the classroom, in the conference, clear and logical speech is not a luxury—it is a necessity.

Reading 1, "Preparing to Talk," presents some things to be considered when you are preparing your presentation. Reading 2, "Organizing the Talk," discusses various patterns of organization and offers tips as to which may be most appropriate to meet your speaking needs. Reading 3, "Supporting the Talk," discusses various means and types of support you can use to accomplish your goal for speaking. Reading 4, "Presenting the Talk," describes methods used when speaking, and provides tips on "platform behavior" which can enhance the delivery of your talk. And finally, Reading 5, "The Military Briefing," addresses the components and requirements of the kind of presentation most often given by senior NCOs.

PREPARING TO TALK

RECENT STUDIES show that speaking in front of a group is by far the greatest fear of most people. It ranks ahead of the fear of dying, riding in an airplane, or failure in other areas of one's personal life.

Unless you are highly unusual, at some time you have been presenting a talk in front of a group of people and your knees began shaking, your voice quivered, your head ached, and the only dry place on your body was the inside of your mouth. Then the strange muscle spasms began. One eyelid began to twitch uncontrollably. Your legs felt like soft rubber. And then it happened: Your memory, on its own and for no apparent reason, left you. And at this point you promised yourself that you would never get yourself in this situation again.

Although the fear of speaking is common, studies show that one of the most admired qualities in others is their ability to speak in front of a group. Furthermore, other things being equal, the person who can communicate ideas clearly will be more successful. The rest of this lesson is directed toward helping you be the kind of speaker others admire—the kind who gets the job done in every speaking situation.

TYPES OF SPEAKING

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043. Identify the different types of speaking used in the Air Force.

There are several types of speaking common in the Air Force. Although most of the same general principles and techniques apply to all types, there are some differences.

Briefing. The best military briefings are concise and factual. Their major purpose is to inform—tell about a mission, operation, or concept. At times they also direct—enable listeners to perform a procedure or carry out instructions. At other times they advocate or persuade—support a certain solution and lead listeners to accept that solution. For example, a staff officer might want officers at a higher echelon to accept a certain solution. Every good briefing has the virtues of accuracy, brevity, and clarity. These are the ABCs of the briefing. Accuracy and clarity characterize all good speaking, but brevity distinguishes the briefing from other types of speaking. By definition, a briefing is brief, concise, and direct.

Teaching lecture. Much speaking in the Air Force is directed toward teaching. The lecture is the method of instruction most often used. Lectures are defined in AFM 50-2, *Instructional System Design*, as "presentations of information by a single person." As the name implies, the primary purpose of a teaching lecture is to teach or to inform students about a given subject. For convenience, teaching lectures can be divided into the following types: (1) formal lectures, where the communication is generally one-sided with no verbal participation by the students, and (2) informal lectures, usually presented to smaller audiences and allowing for verbal interaction between the instructor and students.

Formal speech. A speech generally has one of three basic purposes: to inform, to persuade, or to entertain. (1) The informative speech is a narration concerning a specific topic, but does not involve a sustained effort to teach. The Air Force Speakers Program, orientation talks, or presentations at commander's call are examples of speeches to inform. (2) The persuasive speech is designed to move an audience to belief or action on some topic, product, or other matter. Recruiting speeches to a high school graduating class, budget defenses, and courts-martial summations are all primarily speeches to persuade. (3) The entertaining speech gives enjoyment to the audience. The speaker often relies on humor and vivid language as a primary means of entertaining the listeners. A speech at a dining-in is frequently a speech to entertain.

Reprinted from AU-1, *Communication Techniques*, Vol. VI, "Speaking Effectively," Air University, Maxwell AFB, Ala., Rev. Ed. 1980.

Exercises (043):

1. **List the different types of speaking commonly used in the Air Force.**

2. **Explain the difference between a briefing and a formal speech.**

AUDIENCE

044. Identify the actions a speaker should take to promote his or her relationship with the audience.

Talking to hear one's own voice may feed the ego and even cause self-persuasion, but whatever type of speaking you are doing, the goal should be to communicate with others. A basic assumption, then, is that all speaking should be audience-centered. Since speakers have a primary responsibility of adapting the message to the audience, they need to know as much about their audiences as possible.

Audience analysis. There are two reliable methods for gaining information about audiences. Used together they can be extremely useful. The first is to organize information you already have about the audience. Knowing such variables as age, sex, rank, and experience can help you relate to the audience. If one or more of these or similar variables separates you from the audience, you may want to give special attention to ways of emphasizing similarities and reducing differences.

The second method, when you have not talked to a particular group before, is to check with someone who has. Perhaps a friend or colleague has already talked to the same group and can tell you what to expect. A local civic club regularly interrupts and heckles guest speakers. Imagine the chagrin of a speaker who is not familiar with this practice and takes the interruption and heckling personally. Granted, this audience behavior is a pretty extreme case and may not be the proper way for an audience to react. Still, it is better to know about such things before one speaks.

Audience attitude. In the preceding instance, the uninformed speaker might assume wrongly that the audience was hostile. In some rare instances, you may have to face a hostile audience. An extreme example of a speaker facing a hostile audience is when the President must confront a group of militants on the White House lawn. In such circumstances, the emotions of the audience are so great that effective communication becomes very difficult.

Most likely you will never have to speak to an overly hostile audience, but you may have to speak to one that is mildly hostile either to you or to your ideas. What can you do? Assuming that you are determined to be heard and the audience is willing to give you a chance, hostility can often be overcome. Clearly, your first task as a speaker is to change the audience attitude—if not to friendliness, then at least to a more neutral position. Your chances for success are much greater if you somehow build rapport with your listeners. Often this can be done by using one or more of the following techniques:

1. Avoid behaving in a conceited or antagonistic manner.
2. Demonstrate a genuine concern for your listeners.
3. Exhibit friendliness and warmth toward your listeners.
4. Emphasize similarities between your listeners and you.
5. Be honest and straightforward.
6. Use humor that is in good taste, especially if it is at your own expense.
7. Indicate your association with people who are held in high esteem by the audience.
8. Don't let negative, nonverbal aspects of your behavior contradict what you are saying.
9. Demonstrate that you are an expert and have done your homework on the subject.
10. Refrain from stating the main idea or conclusion at the outset. Instead, first present facts that you and your listeners agree upon, then build toward your conclusion.

Most audiences will be friendly. They consist of people who are, for the most part, favorably disposed toward you as a speaker. Most people want you to do a good job. Furthermore, they usually are not in violent disagreement with your point of view. An informative briefing to other members of your organization, a speech to a local civic club, and a teaching lecture in the classroom are examples of speaking before friendly audiences.

Exercises (044):

1. **Why is it important for a speaker to know as much about his or her audience as possible before preparing to speak?**

2. **Paraphrase the ten recommended techniques for building rapport with the audience.**

SUBJECT

045. Describe the factors a speaker should consider when selecting a subject for a talk.

The problem of selecting a subject for a briefing or teaching lecture does not often arise in the ordinary course of Air Force business. You will seldom have to look around for something to talk about. The subjects are implicit in the work of the organization. A staff briefing, for example, arises from the need to communicate certain subject matter. A teaching lecture is given to satisfy a particular curriculum need. A formal speech to persuade, inform, or entertain, on the other hand, may provide you with more latitude in selecting the subject.

Selecting the subject. On some occasions, the subject of your speech will be determined—at least partly—by the group. A local civic club, for instance, may ask you to talk to them about a job, hobby, or community project you are heading up. At other times, the choice of the subject will be left entirely up to you. Almost always, however, you will be free to choose the particular aspect or area of your subject that you wish to emphasize. There are several questions you can ask yourself about the subject or aspect of the subject you choose to talk about:

1. Is this the best subject I can think of? Certainly this is a tough question. But you can answer it more wisely if you consider a number of subjects. As a rule, a carefully selected subject or aspect of the subject chosen after some thought will be a better choice than the "straw-clutching" effect that characterizes many searches for suitable subjects.

2. Is this a subject that I already know something about and can find more? If not, then perhaps you should search elsewhere. There is no substitute for complete and authoritative knowledge of the subject.

3. Am I interested in the subject? If you are not interested in what you will be talking about, you will find preparation a dull task, and you will have difficulty in capturing the interest of the audience. Talking about a community service project on which you have spent many hours or a new program that you helped implement on the job is probably much closer to your heart than a subject that you found while searching through a list of suggested topics.

4. Is the subject suitable for my audience? Does it fit their intellectual capacity? Is it a subject that they will be interested in? A subject may be suitable or interesting to an audience because it vitally concerns their well-being, offers solutions to a problem they have, is new or timely, or if there is a conflict of opinion about it.

5. Can the subject or aspect of the subject be discussed adequately in the time I have? One of the greatest problems many speakers have is that they fail to narrow their subject. Because of this problem, they generally do one of two things: (a) They don't adequately cover the subject; or (b) They talk too long. Both results are bad.

Narrowing the subject. Some subjects are so broad or complex that you cannot possibly do justice to them in a single speech. In ten minutes you cannot tell much about "Soviet Industry," but perhaps you can adequately cover "The Iron Industry of the Soviet Union" or "Steel Production in the Urals." Speakers often tackle subjects that are too broad. You can pare a big topic down to size by moving from the general to the specific. The general and abstract topic "Airpower," for example, may be successively narrowed to the more concrete and specific "Combat Radius of the B-52." Here are the steps followed in limiting this subject:

- Airpower (Much too abstract)
- Military Airpower (Not much better)
- The Air Force (A beginning in the right direction)
- Strategic Air Command (A little more specific)
- The B-52 (Something concrete)
- Combat Radius of the B-52 (A suitable topic)

Limit your subject in terms of your own interests and qualifications, your listeners' needs and demands, and the time allotted to your speech.

Choosing a title. The title is a specific label given to the speech—an advertising slogan or catchword that catches the spirit of the speech and tantalizes the potential audience. Generally the exact phrasing of the title is not decided until the speech has been built. At other times it may come to mind as you work on the speech. At still other times it may come early and guide your planning. An effective title should be relevant, provocative, and brief.

Listeners do not like to be misled. If the speech has to do with communication, then some reference to communication should be in the title. On the other hand, don't include words in the title merely to get attention if they have no relevance to the speech itself. "The Eleventh Commandment" is a relevant title for a speech that addresses the fact that the commandment of "Thou shall not get caught" has seemed to replace some of the other commandments. "A Pat on the Back, a Punch in the Mouth" is certainly a more provocative title than "How Positive and Negative Reinforcement Affects our Children." "You Cannot *not* Communicate" is briefer and more provocative than "The Impossibility of Failing to Communicate."

Although the preceding three titles are all rather catchy, sometimes the direct approach is very effective. Consider the very descriptive title given earlier, "Combat Radius of the B-52." A speech or lecture on effective listening might simply be titled "Effective Listening." Both of these titles are relevant, provocative (due to the subject matter itself), and brief.

Exercises (045):

1. **Paraphrase the five recommended questions that a speaker should ask himself or herself when choosing a subject for a speech.**

2. **Why is choosing the right title important when preparing for a talk?**

OBJECTIVES

046. Determine why choosing the proper type of speech is important in accomplishing the speaker's objective.

The purposes for speaking—informative, persuasive, entertaining—are important. But the general responses and specific responses you expect from the talks you give are also significant.

General responses. The purposes of speaking suggest the general kinds of responses desired from the audience. An informative presentation seeks audience understanding. A persuasive presentation seeks a change in beliefs, attitudes, or behavior. An entertaining presentation seeks to divert, amuse, or in some other way cause listeners to enjoy themselves.

Specific responses. In addition to the three broad purposes or aims, there are more specific purposes, sometimes referred to as goals or objectives of speaking. An effective oral presentation has immediate and specific objectives stated in terms of what is expected from the listeners. These specific objectives fall within the broader purposes of information, persuasion, or entertainment. The objectives do not state what the speaker is to do. Rather they tell what the speaker wishes the audience to understand, believe, feel, do, or enjoy. The following examples illustrate the relationship between subjects, general purposes, and specific objectives:

1. Subject: From Iowa to the Air Force
   Purpose: To entertain
   Objective: For listeners to enjoy the humor of a young man from Iowa making the transition from an Iowa farm to the Air Force
2. Subject: You cannot *not* communicate
   Purpose: To inform
   Objective: For listeners to understand that we are constantly communicating verbally and nonverbally
3. Subject: Equality for all
   Purpose: To persuade
   Objective: For listeners to dedicate themselves anew to the principle of racial and social equality for all

Exercises (046):

1. **Identify the differences between an informative speech, a persuasive speech, and an entertaining speech.**
2. **If an oral presentation is to be effective, how must the speaker word the objectives?**

GATHERING MATERIAL

047. Explain the steps to be followed in gathering relevant material necessary for an oral presentation.

With the general purpose and specific objective in mind, you are ready to gather material on the subject. The source for this material should be your own experience or the experience of others gained through conversation, interviews, and written or observed material. You may often draw from all these sources in a single presentation.

Self. The first step in researching an oral presentation is the assembly of all the personal knowledge you have about the subject. A self-inventory may suggest a tentative organization, but even more important, it will point up gaps in knowledge where you need to do further research.

Others. The second step in the research process is to draw on the experience of others. People who are interested in the subject provide many ideas during the course of conversation. The most fruitful source, of course, is the expert. Experts help you clarify your thinking, provide facts, and suggest good sources for further research. Their suggestions for further sources can enable you to narrow your search without having to investigate a large bulk of material.

Library. Modern libraries provide us with an abundance of sources: books, newspapers, popular magazines, scholarly journals, abstracts, subject files, microfilms. You must constantly be concerned with the accuracy and relevancy of the material. Using material printed in 1950 to understand television today would probably lead to inaccurate, irrelevant conclusions.

THE NEXT STEP

The next step in the research process is to evaluate the material gathered. You will probably find that you have enough material for several presentations. If you haven't already begun to organize the presentation, you will want to do so. Next you will want to select the best kinds of support for the points you wish to make. Then you will want to prepare a good beginning and ending for the talk.

Exercises (047):

1. **Summarize the steps to be followed in gathering material for an oral presentation.**

2. **How may a library assist a speaker in gathering information for a talk?**

Reading 2

ORGANIZING THE TALK

CLEAR ORGANIZATION is vital to effective speaking. The most prevalent weakness among speakers at all levels is the failure to organize material for the audience. Speakers have the responsibility to lead listeners mentally from where they are at the beginning of a talk to where they are supposed to be at the end. The message must be organized with the audience in mind; the organization should conform to the thinking processes and expectations of the listeners.

Each speech, lecture, and briefing needs an introduction, a body, and a conclusion. In most instances the introduction and conclusion should be prepared after the body of the talk, since the material in the body is a guide for preparing the introduction and conclusion.

The first consideration in planning the body is how to organize the main points, but organization of subpoints is also important. Arrangement of the main points and subpoints will help both the speaker and the audience remember the material—the speaker while speaking, and the audience while listening.

Most oral presentations, regardless of their length, can be divided into from two to five main points. Five is about the maximum number of points from one talk that listeners can be expected to remember.

The most typical ways of organizing main or subpoints of a talk are by the patterns: time, space, cause, problem/solution, pro/con, or topic. Furthermore, as illustrated throughout this chapter, *certain strategies can be used with each pattern.* How does a speaker decide which patterns and strategies to use? The material will often organize more easily with one pattern and strategy than with another. Let us consider how various patterns and strategies can be used to organize the main points.

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048. Identify the different organizational patterns a speaker may use to arrange the main points of a talk.

TIME

Our vocabularies are filled with words that refer to time: now, tomorrow, yesterday, today, sooner, later, earlier, next (last) week (month, year, time). We work, play, sleep, and eat at certain times: births, engagements, marriages, deaths. The time, or chronological pattern of organization, then, is a natural way of arranging events in the sequence or order in which they happened or in giving directions in the order to be followed in carrying them out. This kind of organization is sometimes called sequential organization. Certain processes, procedures, or historical movements and developments can often be explained best with a time sequence organizational pattern.

The medical technician discussing the mouth-to-mouth system of artificial respiration would probably use a time order for the main points: (1) preliminary steps in preparing the body—proper position, mouth open, tongue and jaw forward, (2) the mouth-to-mouth process, (3) caring for the patient once breathing resumes. Time order is also a logical approach for talks dealing with such subjects as "How to Pack a Parachute," "Development of the B-1 Bomber," or "How To Prepare a Speech." Furthermore, any talk on a subject with several phases lends itself well to the time pattern. For example, a talk with an objective for the audience to know that the common market was originally planned to develop in three phases might have as main points: (1) phase one, a customs union where nations agreed to reduce duties, (2) phase two, an economic union allowing laborers and goods to move freely across national borders, and (3) phase three, a political union with national representatives as members of a common parliament and using a common currency.

Of course, rather than looking forward in time from a given moment, the strategy might be to look backward from a point in time. In other words, the strategy might be to move from recent to earlier time rather than from early to late. Regardless of which strategy is used, the flow of the talk and the transitions from one point to the next

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should make the chronological relationships between main points clear to audience members.

SPACE

A spatial or geographical pattern is very effective in describing relationships. When using this pattern, the talk is developed according to some directional strategy such as east to west or north to south. For instance, if the speaker were describing the domino theory of Communist infiltration, the strategy would probably be to arrange the main points according to the geographical locations of various nations and how they were affected by Communist infiltration within their geographical region.

With talks on certain objects, the strategy might be to arrange the main points from top to bottom or bottom to top. A fire extinguisher might be described from top to bottom, an organizational chart from the highest ranking individuals to the lowest ones in the organization, a library according to the services found on the first floor, then the second, and finally those on the third.

Sometimes, the strategy is to organize the talk from the center to the outside. For example, the control panel in an airplane might be discussed by describing first those often used instruments in the center then by moving out toward the surrounding instruments which are used least often.

In all talks arranged spatially, each aspect or main point needs to be introduced according to the strategy used. Just as with a talk organized by time, the subject matter and the transitions should include elaboration and clarification of how the main points relate to one another. A simple listing of the various objects or places without elaboration as to how they are related may confuse the listeners.

CAUSE

A causal pattern of arrangement is used in a talk where one set of conditions is given as a cause for another set. In such talks, one of two basic strategies may be used to arrange main points. With a cause/effect strategy you begin with a given set of conditions and contend that these will produce or have already produced certain results or effects; with an effect/cause strategy you take a certain set of conditions as the effects and allege that they resulted from certain causes.

The cause/effect strategy might be used in a talk concerning the increasing number of women in the Air Force. The talk might first discuss the fact that women are now assuming more responsible leadership roles in the Air Force. One effect of women assuming such roles might be that women are joining the Air Force in increasing numbers.

The effect/cause strategy might be used in a talk on child abuse. The first point might explain the effects of child abuse upon the children themselves, the parents, and even on society. The second point might allege that the causes are that parents themselves were abused as children or that proper education on parenting was not received.

Whichever strategy is used, two cautions must be observed. (1) Beware of false causes. Just because one event or circumstance precedes another does not mean that the former causes the latter. Many persons assume that "First A happened, and then B took place, so A must have caused B." (2) Beware of single causes. Few things result from a single cause. Many causes are more common with one playing on another until it is hard to disentangle them. Lack of safety features on automobiles is not the only cause of most highway accidents, but this cause, plus careless driving or unsafe highways, may account for many highway accidents.

PROBLEM/SOLUTION

This pattern, sometimes called the disease/remedy pattern or the need/satisfaction pattern, presents listeners with a problem and then proposes a way to solve it. With this pattern, you must show that a problem exists and then offer a corrective action that is (1) practical, (2) desirable, (3) capable of being put into action, and (4) able to relieve the problem. It must also be one that does not introduce new and worse evils of its own. For example, the issue of controlling nuclear weapons has long been debated. Those against control argue that erosion of national sovereignty from arms control is more dangerous than no control.

The problem/solution pattern is especially useful with briefings whose purpose is to provide listeners with information on which to base decisions. It can also be used effectively with persuasive speeches and teaching lectures where the speaker wants to present a need or a problem followed by a way or ways to satisfy the need or solve the problem.

There are different strategies that might be employed when using the problem/solution method. If the listeners are aware of the problem and the possible solutions, you will probably discuss the problem briefly, mention the possible solutions, then spend more time in showing why one solution is better than others. For instance, if the objective is for listeners to comprehend that solar energy is the best solution to the energy crisis, our main points might be: (1) The world is caught in the grip of an energy crisis. (2) Several solutions are possible. (3) Solar energy is the best long-term solution.

If the listeners are not aware or are only slightly aware of the problem or need, you may describe in detail the exact nature of the problem. Sometimes, when listeners become aware of the problem, the solution becomes evident and little time is needed to develop the solution in the lesson. At other times, you may need to spend time developing both the problem and the solution.

Still another strategy is to alternate or stagger portions of the problem with portions of the solution. For example, the cost of a project may be seen as one problem, workability another, time to do the project as a third. Taking up each portion and, in turn, providing solutions to cost, workability, and time as you present these aspects of the problem may be more satisfying to your listeners than if you had discussed all of the problem

and then its total solution. The problem/solution pattern is a good one for advocacy or persuasive briefings.

PRO/CON

The pro/con pattern, sometimes called the for/against pattern or advantages/disadvantages pattern, is similar to a problem/solution pattern in that the talk is usually planned so as to lead to a conclusion. A major difference, however, is that fairly even attention is usually directed toward both sides of an issue with a pro/con pattern.

There are various strategies to consider when using the pro/con pattern. One consideration is whether to present pro or con first. Another is whether to present both sides and let listeners draw their own conclusions or to present the material in such a way that listeners are led to accept the "school solution." For instance, with a talk on the effects of jogging, you must decide whether to present the advantages or disadvantages first. Then you must decide whether to let listeners make their own decision as to the advantages or disadvantages.

When deciding the specific strategy to use with the pro/con pattern and determining how much time to spend on each, the following guidelines may be helpful: (1) Giving both sides fairly even emphasis is most effective when the weight of evidence is clearly on the favored side; (2) Presenting both sides is more effective when listeners may be initially opposed to the school solution; (3) Presenting only the favored side is most effective when listeners already favor the school solution or conclusion; (4) Presenting the favored side last makes its acceptance more likely, especially if the other side is not shown in too favorable a light.

TOPIC

A topical division of the main points of a talk involves determining categories of the subject. This type of categorizing or classifying often springs directly from the subject itself. For instance, a talk about a typical college population might be divided into topical divisions of freshmen, sophomores, juniors, and seniors, with each class division serving as a main point. Housing might be discussed in terms of on-base and off-base housing. A talk on the Minuteman intercontinental ballistic missile might be arranged according to the main points of warhead, guidance, and propulsion systems.

At times the material itself suggests certain strategies for ordering the main points. For instance, a talk on levels-of-learning type lesson planning would most likely begin with knowledge-level planning as the first main point since knowledge-level lessons are generally simpler to understand. Then the lesson would move on through the hierarchy to comprehension, application, analysis, synthesis, and finally evaluation levels. In other words your talk would follow a simple-to-complex strategy in organizing the "topics" or levels of lessons.

Other talks might follow strategies of known to unknown, general to specific, or specific to general arrangement of topical main points. There are many strategies for arranging topical main points. The important consideration, as with any pattern, is to give thought to the strategy of arrangement in order to help the listeners' understanding.

Exercises (043):

1. **Explain how the problem/solution pattern differs from the pro/con pattern.**
2. **Describe the differences between the time and space patterns.**
3. **What is meant by a topical pattern?**

COMBINING PATTERNS

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049. Describe how organizational patterns may be combined to support a speaker's talk.

If a single pattern is used to organize the main points, your talks will make more sense. And as a speaker, you will be able to remember more readily what your main points are when you present the talk. Even more important, listeners will be able to follow the talk more easily and remember what you said if a single logical pattern of organization is used for the main points.

Although you may choose a certain organizational pattern for the main points, you may decide to use different patterns for subpoints. Consider the following tentative outline of a talk with an objective or goal for listeners to know the importance of nonverbal factors of communication:

NONVERBAL COMMUNICATION

I. Performance factors

- A. Upper body (head and face)
  - 1. Positive effects
  - 2. Negative effects
- B. Middle body (arms, hands, torso)
  - 1. Positive effects
  - 2. Negative effects
- C. Lower body (hips, legs, feet)
  - 1. Positive effects
  - 2. Negative effects

II. Nonperformance factors

- A. Objects
- B. Space
  - 1. Personal or body
  - 2. Furniture arrangement
- C. Time

Notice that the main points (I. Performance factors and II. Nonperformance factors) are arranged topically. The subpoints for main point I (upper, middle, and lower body) are organized spatially. A pro/con pattern is followed in discussing positive and negative effects from each body performance factor. The subpoints of main point II (objects, space, and time) are organized topically as are the two subpoints under space. The important thing to remember is that *each set of main points or subpoints should follow a logical pattern of organization.* The tentative outline reflects this fact. Of course, it may be that none of the formal patterns of organization discussed in this chapter adequately fits your content. For instance, with a speech to entertain, you might simply string together a group of interesting or humorous incidents that would hold the audience's attention. But whatever the case, you must strive to organize your talk in a way that will help you present the information to your listeners in the most meaningful fashion. As you construct a tentative outline, you must do so with your listeners' needs in mind. Quite often, the experienced speaker revises the outline three or four times before being satisfied and finally putting it into final form for the talk.

Exercises (049):

1. **What advantages do you afford your listeners by using a single pattern?**
2. **How does combining organizational patterns aid a speaker in presenting a talk?**

NOW THAT YOU HAVE ORGANIZED

The organization patterns and strategies you choose provide structure to the body of your talk. But structure without content is not enough. Interesting and effective supporting material is needed. To use an analogy, the organization provides the skeleton of the body—in this case the body of the talk; the supporting material supplies the flesh for the body of the talk.

SUPPORTING THE TALK

MOST LISTENERS find it difficult to understand unsupported ideas or assertions. Suppose, for instance, you decide to speak on "How to Organize a Talk." You tell your listeners that they can organize a talk according to one of several possible patterns of presentation. You then tell them that the most common patterns are: time, space, cause, problem solution, pro/con, and topic. Most likely you will not have provided enough information for your listeners to actually use these patterns of organization. You will need to go on and explain each of these patterns as has been done in the preceding reading.

FACTORS TO CONSIDER

Consider all factors when choosing support. The subject of your talk, the type of talk (briefing, lecture, or speech) and the composition of your audience will help you determine the amount and kinds of support to use.

Briefing. For a briefing, support is generally limited to factual data carefully selected to accomplish the "need to know." The requirement for brevity dictates that you not use extraneous or "nice to know" support. Visual aids are often used to save time and achieve accuracy. Humor is seldom used. If the purpose of the briefing is persuasive, use logic rather than emotion to persuade.

Teaching lecture. Factual data is also important in the teaching lecture, although there may be a need to use support that also appeals strongly to the emotions. Humor and other attention-commanding materials are common throughout the lecture. Visual aids are often used, not only to save time and improve accuracy but also to clarify ideas.

Formal speech. Informative speeches use much the same support as teaching lectures. Entertaining speeches rely heavily on humor and other attention-getting support. Persuasive speeches are characterized by more appeal to emotions or motives than any other kind of talk you will give. Appeal to such motives as fear, curiosity, loyalty, adventure, pride, and sympathy is common in persuasion. The distinction between logical and emotional support, however, is in content rather than form. Any type of verbal and visual support mentioned in this reading may be primarily logical or emotional. *But just because support appeals to the emotions does not mean it has to be illogical.*

LOGICAL THINKING

050. Identify some common pitfalls of logical thinking a speaker should avoid when preparing for a talk.

Both verbal and visual support, whether used primarily for emotional or logical appeals, should be backed by logical thinking. Lesson 2, reading 4 is titled "Logical Thinking." Therefore the present reading will only suggest some problems that commonly affect logical thinking of persons preparing talks.

Slanted reasoning. Slanted reasoning occurs when a speaker makes invalid inferences or reaches false conclusions due to faulty reasoning. Several common types of slanted reasoning follow:

1. The hasty generalization happens when a speaker judges a whole class of objects from an insufficient sample. The person who meets two persons from Iowa and dislikes them, and based on a sample of two, concludes that all people from Iowa are unlikable is guilty of making a hasty generalization.

2. The faulty dilemma stems from the fact that although some objects or qualities can be divided into discrete categories, most cannot. Deeds that are not evil are not necessarily good. A cup of coffee may be neither hot nor cold; it may be lukewarm.

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3. The faulty analogy happens when a speaker assumes that two things alike in some way or ways are alike in all ways. The human body and an automobile engine are alike in many respects: both must operate within certain temperature limits, both last longer if cared for, both consume fuel. But you would not argue that since adding tetraethyllead to gasoline makes an automobile engine run better, people should put tetraethyllead in their coffee.

4. Stacking the evidence occurs when speakers lift out of context only the support that fits their talk while ignoring equally important material that is detrimental to points they are trying to make.

5. Faulty causal reasoning is seen when a speaker reasons that if A is present B occurs; further if A is absent B does not occur; therefore the speaker reasons that A causes B. Of course it could be that B causes A, or perhaps both are caused by a third ingredient, C.

Irrational appeals. Irrational appeals depend upon blind transfer of feelings from one thing to another without logical thought. Consider the following examples of irrational appeal.

1. Name calling refers to putting people or things in a bad light by calling them uncomplimentary names, such as fatso, warmonger, Seward's Icebox.

2. Glittering generalities are apparent when speakers wrap their ideas in good, golden, glittering words such as "peace," "culture," "equality," and "flag."

3. Bandwagon appeal operates on the principle that "Everyone else is doing it so you should too." Some speakers use the bandwagon appeal to promote the feeling that listeners would be presumptuous to judge for themselves something that the group accepts.

4. "Plain folks" strategy is used when speakers attempt to identify with the simple (and presumably desired) things of life. A speaker who says in front of a farm audience, "I know how you feel, I was born and raised on a farm, and I want to keep the big city politicians' hands off your property tax money," is using plain folks strategy. Identifying with your audience is a sound practice, but identification alone is not rational support.

5. Prestige or transfer is used by those who drop names or use other strategies to appear important. They believe that simply associating themselves with certain personalities will cause listeners to associate desired traits of those personalities with them as the speakers.

Exercises (050):

1. **Describe five types of slanted reasoning.**

2. **Identify five types of irrational appeals.**

VERBAL SUPPORT

051. Identify the types of verbal support that can be used to aid a speaker.

Verbal support is used either to clarify the points you wish to make or prove your assertions. Definitions, examples, and comparisons are used primarily for clarification. Statistics and testimony of experts can be used either for clarification or proof. Humor can be used with any of the preceding five types of verbal support and will be treated separately in this reading.

Definitions. Definitions are often needed to clarify or explain the meaning of a term, concept, or principle. But like so many words, definition can mean different things and function in different ways.

In some talks you may need to use words that are technical, complex, or strange to your listeners. With increasing specialization in the Air Force in both theoretical and applied subjects, the development of new words or terms races ahead of dictionaries. Words such as pneudraulics (military aircraft brake systems), taxonomy (scientific classification), détente (military strategy), or groupthink (a problem of groups) might require literal definitions or restatement in simpler language.

At other times there is a need to define words that are frequently loosely employed. Some words simply have different meanings for different people. Words such as democracy, equal rights, security needs, and loyalty can usually be defined easily. For instance, disseminate can be defined very simply as "spread widely." Sometimes a speaker may seek novel and memorable ways to define such terms. Pragmatism might be defined as "a fancy word to mean that the proof of the pudding is in the eating." Sometimes it takes a little longer to fully define what is meant by a certain term. A former POW might define the sacrifice of one prisoner for another:

> When you see an American prisoner giving up his meager ration of fish, just so another American who is sick can have a little more to eat, that is sacrifice. Because when you don't have anything, and you give it up, or you have very little and you give it up, then you're hurting yourself, and that is true sacrifice. That's what I saw in the prison camp.

Definitions should also be used to explain the meaning of acronyms—words or other combinations of letters formed from the initial letter of each of the successive parts of a compound term. In the preceding paragraph, with some audiences, it might have been necessary to explain that POW stands for prisoner of war. If you were discussing PME at AU, you might have to explain the PME at AU means professional military education that is taught at Air University. Furthermore, you might go on to mention that PME includes AWC, ACSC, SOS, and SNCOA—that is, Air War College, Air Command and

Staff College, Squadron Officer School, and the Senior Noncommissioned Officer Academy.

Finally, at times an entire talk may be needed to define or otherwise introduce students to a new concept or principle, as, for example, a speaker discussing the concept of communication as transaction. Perhaps an entire lecture would be needed to explain that the transactional approach means to consider the total communication process and the interaction of the various parts of the process on each other. Other forms of support material such as examples and comparisons would be needed to fully define what was meant.

Examples. Any time other persons ask you to "give a for instance" they are asking for an example to clarify the point you are trying to make. Sometimes the examples may be reasonably long. The parables of Jesus, the stories of Homer, Aesop's *Fables*, and many of the stories that appeared in the speeches of Abraham Lincoln are detailed examples.

At other times a short example is sufficient. In some cases short examples are similar to definitions. The earlier definition of "sacrifice" given by the former POW might be considered a short example. The fact that some support materials might be classed either as definitions or examples should not be a major concern to you. As a speaker, you are more interested in *using* effective support material than in classifying it.

Often short examples can be clustered together in order to help listeners gain a more complete understanding of the point. In a talk on barriers to effective communication, a speaker might cluster examples of spoonerisms: "Is the bean dizzy?" ("Is the dean busy?"); I'll have a coff of cuppee." (I'll have a cup of coffee); "A half-warmed fish within us." (A half-formed wish within us.).

You should ask yourself several questions about examples you plan to use:

- Do they accurately represent the point?
- Will listeners clearly understand their meaning?
- Do they fit the content? (Avoid those that may confuse.)
- Will humorous ones add or detract from the lesson? (Some guidelines for using humor are presented later in this reading.)
- Do they come from personal experience or can other examples be personalized in such a way as to seem real?
- Can anything be gained from clustering more than three or four examples? Usually not.
- Do long ones take too much time? (At times, attention-getting value of long examples may justify their use.)
- Are they interesting?

The appropriate answers to these questions should be obvious.

Comparisons. Description often becomes more graphic when we place an unknown or little understood item beside a similar but better known item. You might want to compare things that are unlike or things that are very much alike.

Metaphors such as Winston Churchill's "iron curtain" or similies (using the words "like" or "as" such as Robert Burns' "My love is like a red, red rose" or saying "strong as an ox") are comparisons of things that are unlike in most ways. Speakers may compare unlike things. For instance, one might say, "The flow of knowledge is like the relentless and uncompromising flow of a river after the spring thaw as it imposes on us the requirement that we not only adjust to but anticipate the future." Or a speaker might show that being a member of a branch in an Air Force organization is like living in a family where we have intimate contact with each other. The analogy or comparison might be carried further by pointing out that in a branch, as in a family members can protect one another, help one another, and irritate each other.

Although analogies that compare dissimilar things serve as an excellent means of clarification, they have limited utility as proof. If you wish to support an assertion, you must compare similar things. Comparison of Soviet air power with US air power or the relationship between the mayor and city council with the relationship between the base commander and his or her staff are like comparisons. Arguing that a longer orientation session for students in a certain NCO academy would improve academic performance because it did at another NCO academy would be comparing like phenomena—in this case, two NCO academies.

Contrast is a special form of comparison. For instance, showing how Air Force training differs from Army training or how today's standard of living differs from that of a generation ago clarifies and explains a point by showing contrast or differences.

Obviously, any kind of comparisons may be very brief such as those given here or they may be quite long. You need to decide what will work best in a given situation. But whether long or short, comparisons are a valuable and generally underused method of verbal support.

Testimony. Words and thoughts of others are particularly useful when you wish to add strong proof support for assertions or points that you make. No one is expected to be an expert on all subjects; speakers often must rely on what others have said. At times testimony of others is used simply to clarify or explain an idea; often it is intended to provide proof for a claim.

If you are presenting a talk on managerial effectiveness in an organization, one of your main points might be the importance of effective downward communication. In other words, you want to stress how important it is for supervisors to keep their subordinates informed. You might quote from a recent "Air Force Policy Letter for Commanders," which comes from the office of the Secretary of the Air Force. It says, "Commanders and supervisors have an increased responsibility to keep Air Force military and civilian members informed." You might also report the findings from a recent study by the International Association for Business Communicators which show that "face-to-face communication, including

group meetings and one-on-one dialog" proved the most effective means of communicating with employees. Sometimes, you will want to use direct quotations as we have done here. At other times you will paraphrase what another has said. Whatever the case, there are two tests of testimony: (1) Are the sources competent—do they know what they are talking about? and (2) Can they be trusted—are they free from bias? Other considerations are: Is the testimony relevant, clear, and interesting? And are the quotations longer than necessary?

Statistics. Statistics are probably the most misused and misunderstood type of verbal support. When properly collected and wisely used, statistics can help speakers clarify their ideas. Statistics are also the most powerful proof support we can use. Not all figures, however, are statistics; some are simply numbers. Statistics show relationships, largeness or smallness, increases or decreases, or summarize large collections of facts or data. When you choose statistics, there are some questions to ask.

1. Are the statistics recent? Figures concerning the cost of living in 1960 would have limited usefulness for today's family planning its budget. When selecting statistics to use, be on guard is no date is given or if the statistics are outdated.

2. Do the statistics indicate what they purport to? A single test score may not be a true measure of a student's ability. The number of planes may not indicate the strength of the Air Force.

3. Do the statistics cover a long enough time or enough samples to be reliable? The results of how one class responded to a new curriculum change would be less meaningful than how three or four classes responded to the change.

4. If the statistics are drawn from a sample, does the sample accurately represent the group to which we are generalizing? Public opinion surveys and experimental researchers are generally sensitive to the importance of obtaining a representative sample. Speakers also need to be sensitive to this need.

5. When statistics report differences, are the differences significant? Minor variations can often be attributed to chance. In other words, if you were to collect your statistics again, the results might differ.

6. When comparing things, are the units of measure compared the same? Failure in one course might have a different meaning than failure in another. If more students fail one course than another, you cannot necessarily conclude that the content of one course is more difficult. Perhaps the grading scale rather than the content was more difficult.

7. Do the statistics come from a good, reliable source? And is the source clearly indicated? It is more effective to state the source of the information than to say "recent surveys show."

8. Are the statistics presented to their best advantage to aid listener understanding? Could visual aids be used to present the statistics in graphic or tabular form for easier understanding? Have figures been rounded off where possible? Listeners are more likely to remember "nearly $45,000" than $44,871.24. Are the number of statistics limited so that listeners are not overwhelmed by them? Could the significance of statistics be made more clear with meaningful comparisons. To say that World War II cost the United States $200 billion would not be as clearly perceived if the figures were converted to today's dollars or if they were compared to the cost of today's wars using a standard measure.

Humor. Most listeners admire a speaker who can use humor effectively. Yet few speakers are able to do so. Moreover, when humor is used, it is generally only at the beginning to gain audience attention. Humor can be used with good results in the body of a talk.

There are two reasons to use humor in the body of a talk. One is to recapture the attention of the audience. The attention span of most people is only a few minutes, so unless the material is terribly engaging, a speaker can recall instances when an audience's attention wandered. Humor regains attention. The second reason to use humor in the body of a talk is to emphasize an important point. Although a story or anecdote is seldom real proof, it may reinforce your audience's ability to remember the point.

Humor must be used properly if it is to be effective. There are six essentials to using humor.

1. Know the item thoroughly. We have all heard speakers stumble through a potentially humorous item or make it through in fine shape only to forget the punch line. But if speakers know the story and have told it before, they will be able to tell it again and know the kind of response to expect. It is generally a good rule for speakers not to use a story or humorous item of any kind in a speech unless they have told it several times in informal situations so they can both practice and gauge the reactions of others.

2. Don't use dirty jokes. Some consider off-color stories or bathroom words a cheap way to get a laugh from an audience. But even people who laugh at such stories in private often lose respect for the speaker who uses them in public. Deciding if a joke is inappropriate is not always easy. If there is doubt, the story probably isn't appropriate.

3. Vitalize humor. Stories should be personalized so they are believable, so they sound as if they really happened. Rather than talk about "this guy I heard about," or "this truck driver," the speaker should give the characters in the stories names. Successful comedians and speakers nearly always vitalize their humor.

4. Don't laugh before the audience laughs. Some comedians get away with laughing first, but good speakers never laugh before the audience. If a speaker fails to get the story across, laughing alone on a platform is disaster. If the joke fails, the speaker is best advised to leave it and go on.

5. Capitalize on the unexpected. One of the primary elements of humor is that people laugh when they are surprised. A few years ago streaking was a fad on college campuses. Most firsthand observers laughed when confronted by a streaker. Some of the laughter was no doubt due to embarrassment; most of it was due to the

element of surprise. The following are all types of humor that depend on the unexpected: Quips (of course, men aren't what they used to be—they used to be boys), puns (try our bread, we knead the dough), exaggeration (the heat was so terrific last week that I saw a hound dog chasing a rabbit; they were both walking), understatement (if at first you don't succeed, well, so much for skydiving).

6. See humor in the situation. The best opportunity for adding humor may come in those minutes just before you speak. It may come from things said by those preceding you on the program. It may come from malfunction of your visual aids, getting tangled up in the microphone cord, or from a person sneezing in your audience. And although much of this situational humor may not directly support the point you are making, it can nevertheless help win your audience.

Being witty and humorous is not easy. It helps to have an agile and sophisticated mind—one that adapts skillfully to the audience. Yet many more speakers could use humor effectively if they were willing to try and willing to practice.

Exercises (051):

1. **Explain how a speaker may make use of definitions, examples, and comparisons as support for his or her talk.**

2. **What questions should a writer ask about the statistics he or she has available before he or she chooses to use them as tools to support a talk?**

3. **List six rules a speaker should observe if he or she plans to interject humor into a presentation.**

VISUAL SUPPORT

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052. Identify how visual aids can be used to support a speaker's talk.

Verbal support is certainly at the heart of any good talk, but visual aids can function to dramatize, amplify, or clarify the points you are trying to get across to your audience. AU-1, Volume 8, *Easy Visual Aids*, emphasizes easy to construct and inexpensive visual aids for various kinds of speaking situations. In the present volume, the emphasis is solely on how to use the constructed visual aids in talks you give.

Suggestions. Some basic suggestions apply to visual aids that might be used with any type talk you give.

1. Use only materials that are relevant. Avoid using materials solely for aesthetic or interest value. Certainly, visual materials should be interesting, but the primary purpose of any visual aid is to portray or support an idea graphically for your listeners. Irrelevant materials distract from the idea you are presenting.

2. Use visual materials that are large enough to be seen by all the audience. Nothing is so disturbing as to be seated in the back of the room unable to see the visuals. In preparing for your talk, display the visuals, then move yourself to the location of your most distant listener. If you can't readily see the material, consider replacing it with something more appropriate.

3. Use visual materials only at the proper time. Do not expose the visual material until the proper point in the talk. Clearly mark your notes or outline so you know when you plan to use each piece of visual support. Materials that are visible too soon or that remain in view after the point has been made distract from and interrupt the continuity of the talk. You may want to use the "striptease" or buildup method for revealing a series of points. Don't list ten main points for the audience and then discuss each one. Instead, uncover the points one at a time to keep the audience attention focused.

4. Keep visual materials as simple and clear as possible. Emphasize only the most important information. Omit unnecessary details. A series of simple charts is preferable to a single complicated one.

5. Talk to the audience, not to the visual aid. If you are explaining a chart, look at your audience as much as possible. By the time you make your talk, you should be so familiar with your visual aids that it will be unnecessary for you to look at them closely. When possible, paraphrase the visual instead of reading it, or pause and let the audience read it silently.

6. Place visuals away from obstructions. Don't allow other objects or persons—including yourself—to obstruct the view of your audience. You decided to use visual materials to support and clarify your talk. Don't hinder their effectiveness by obstructing the audience's view.

7. If you plan to use equipment such as an overhead projector, a 32mm slide projector, or a 16mm film projector, make certain beforehand that you know how to use the equipment and that it is set up and ready to go. Also, know whether or not you have a spare bulb, how to change it, or how to improvise and do without the equipment. In other words, be ready for any contingencies that may develop. Many potentially sound presentations fail because the speaker fails to plan for equipment that malfunctions.

8. When using flipcharts, consider flipping from back to front rather than from front to back. There are at least three advantages. First, flipping back to front is easier—try it if you don't think so. Second, flipping from back to front can be done from the side of the charts rather than from the front—between the charts and the audience—as you generally have to do when flipping from front to back. Third, if the paper you use for the charts is relatively thin, the back to front procedure prevents your audience from reading through the paper to a chart you haven't yet discussed.

9. Finally, before you construct a visual aid, ask yourself if the effort and expense required to prepare or procure the aid are justified and add significantly to the overall value of the talk. If not, forget it. Often the time

spent preparing visual aids could be spent better preparing and practicing the talk.

Using a chalkboard. If you use a chalkboard, consider the following additional suggestions:

1. Pare the chalk to desired thickness so that the lines you draw are 1/4 to 3/8 inches wide. Have spare pieces of chalk ready for use.
2. Use a No. 2 soft pencil and yardstick to make erasable guidelines on the board before your audience enters the room. Later when writing on the board during your talk, you can insure straight and even lettering by following lines invisible to your audience.
3. Cramping your letters and diagrams cramps your speaking. To be seen easily at 30 feet, letters should be about three inches high.
4. Avoid using the bottom half of the board if you are speaking from the same floor level as your audience since some listeners may be unable to see.
5. Determine where glare on the board is a distraction. Before the audience enters the room, adjust window shades or avoid these areas of the board.
6. If the room is equipped with a magnetic chalkboard, or if some other metal surface such as a file cabinet is nearby, consider preconstructed visual aids with magnets glued to the back. Reusable magnetic material one inch wide can be purchased in long lengths and be cut easily to the desired length. Two magnets one inch square will support one square foot of lightweight illustration board.

AFTER YOU HAVE YOUR SUPPORT

By this time you have considered the unique factors of your talk. You have decided whether to present a briefing, a lecture, or some type of speech. You have considered your audience, your subject, your objectives and have gathered your material. You have organized the body of the talk and have selected the kinds of verbal and visual support you will use with careful thought toward being logical in your use of support.

Exercises (052):

1. **What should a speaker consider when selecting visual aids to support a talk?**
2. **Identify some things a speaker could do to obtain the best use of the chalkboard.**

Reading 4

PRESENTING THE TALK

ALTHOUGH preparing a talk can be laborious, for many persons the hardest part is actual presentation of the talk. Questions speakers most often ask are: How many notes should I use? How can I overcome nervousness? What kind of physical behavior is appropriate for me to use when I speak? What if my voice isn't suited to speaking before a group? How can I project sincerity and enthusiasm? Answers to these questions will provide the basis for this reading.

METHODS OF PRESENTATION

053. Explain the common methods of presentation available to the speaker.

Speakers can use one of four common methods of presentation: (1) speaking from memory, (2) reading from manuscript, (3) speaking impromptu with no specific preparation, and (4) speaking extemporaneously with, ideally, a great deal of preparation and a limited number of notes. The fourth method usually allows us the most freedom in adjusting to an audience as we speak and is best suited for almost all speaking in the Air Force.

Memorizing. Speaking from memory is the poorest method of delivering talks, and it should be used very sparingly or not at all. While this method may seem to be helpful for persons who cannot think on their feet, the memorized talk is a straitjacket. Such a talk cannot be adapted to the immediate situation or audience reactions. In other words, it does not allow the speaker to adjust to the particular situation. Moreover, the method is almost sure to destroy spontaneity and a sense of communication. The method also requires an inordinate amount of preparation, and the danger of forgetting is ever present.

Manuscript reading. Reading a talk from a manuscript allows for planning the exact words and phrases to use. But the disadvantages of this method of presentation far outweigh the advantages. Many speakers use the manuscript as a crutch instead of fully thinking through the ideas in the talk. All too often the written talk is regarded simply as an essay to be read aloud. Therefore, the talk is too broad and has language that is too abstract to be understood when presented orally.

If you must read from a manuscript, consider the following suggestions:

1. Preparing the manuscript.
   - Spoken words should be simpler, clearer, and more vivid than writing.
   - Sentences should be shorter and ideas less complex than in writing.
   - Transitions between thoughts and ideas need to be clear. Provide signposts to keep the audience from getting lost.
   - Use repetition to emphasize main ideas and key points.
   - Use direct address when speaking about people. Personal pronouns such as *I, we, our, us, you,* are better than *they, people, a person, the reader, the hearer.*
   - Use concrete language where possible. Follow abstract or complicated reasoning with specific examples, comparisons, and definitions.

2. Preparing a reading draft.
   - Use as large type as possible. Special type two or three times larger than ordinary will greatly enhance visibility.
   - Double or triple space to make the words stand out more clearly and reduce chance for confusion or misreading of the text.
   - Type on only one side of the paper to facilitate handling.
   - Mark your manuscript, perhaps using vertical lines between words where you wish to pause. Underscore words you want to emphasize. Some speakers use double

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and triple vertical lines or underlining for added emphasis.

- Mark places in manuscript where you plan to use visual aids.
- Use short paragraphs to reduce the chance of losing your place.
- Some speakers vary the length of lines according to meaning.

3. Practicing the talk.

- Read the talk aloud to see how it sounds. Recording yourself on a cassette recorder and listening to the playback will help you to discover places where you may not be communicating effectively.
- Read and reread the talk several times, perhaps once a day for several days if you have time.
- Try to make your talk sound like conversation, as if you were thinking the words for the first time as you read them.
- Avoid combinations of words that are difficult to say. Make necessary changes on the manuscript.
- Practice looking at your audience most of the time as the manuscript becomes more familiar to you.
- Provide the punctuation with vocal inflection, variety, and pauses.

4. Presenting the talk.

Use one of two methods for handling the manuscript. (1) Hold the manuscript in front of you with one hand high enough so that you can see it without bending your head, but not high enough to hide your face. The other hand will be free to turn pages and gesture. (2) Place the manuscript on a speaker's stand or table so that both hands are free to gesture. Make sure however, that the manuscript is placed high enough to read from without bending over. Sometimes books or other objects may be used to raise the manuscript to the desired height. Whichever method is used, remember to *let the eyes, not the head, drop to the paper.*

- Don't explain why you choose to read the talk. If you have prepared well, you should do a good job and no apologies will be necessary.
- Be willing to change the wording here and there as you go along if it will help you communicate ideas to your hearers. These changes will make delivery more conversational.
- Insert comments of up to a sentence or two in length to add variety, but be careful not to deviate so far from the manuscript that your train of thought is interrupted. You should have carefully thought through and prepared the manuscript. Last minute changes and impromptu asides can be confusing both for you and your hearers.
- Be flexible enough so that you can shorten the talk if necessary.
- Let pauses be dictated by ideas. Pause wherever there would normally be a pause in the same language in informal conversation. You will need to pause often, even when the written punctuation does not dictate a pause.
- Concentrate on the meaning and ideas rather than on individual words. If you have written your own talk, you are intimate with the ideas and the words you chose to express them. You built the talk, you should understand it. Therefore, the most helpful aid to good delivery is to recreate the feeling that helped you put the words on paper. Speak no passage until its meaning hits your mind.
- Construct the next idea in your mind before uttering it.
- Read with all the sincerity, enthusiasm, directness, and force that is proper to the occasion.
- Use gestures and look directly at the audience when executing them.

A manuscript talk, then, is not, as someone once said, merely "an essay on its hind legs." The manuscript should be written in a conversational tone rather than formal English. It is meant to be heard, not read. If you prepare well, practice diligently, and attend to factors of delivery, you can usually read very acceptably and spontaneously.

Impromptu. Speaking impromptu requires a tremendous amount of skill and knowledge. You may find it necessary at times to talk on the spur of the moment without any preparation. But this method should be used only by experienced speakers who are saturated with their subjects and who have the ability to organize their thoughts for learning as they speak. Even these experienced speakers fall back upon thoughts and phrases they have used before. They have spent years, so to speak, in preparing to give an unprepared talk.

Extemporaneous. The technique effective speakers use most widely, extemporaneous speaking, produces the most fruitful results when it is based upon full preparation and adequate practice. The talk is carefully planned and outlined in detail. The speaker's only guide is usually a well-constructed outline. It is a lesson planned idea by idea rather than word by word.

The advantages of teaching from a well-planned outline are many. The method compels speakers to organize ideas and puts pressure on them to weigh materials in advance. It gives freedom to adapt a talk to the occasion and to adjust to audience reactions. It enables speakers to change what they plan to say right up to the moment of utterance. In short, the extemporaneous method will permit the speaker to adhere to the two vital needs of effective speaking: adequate preparation and a lively sense of communication.

You may want to prepare two versions of the outline. One version will be very complete—almost in manuscript form—so you can return to it several weeks or months later if you are called upon to give a similar talk. Another version will be much briefer—perhaps only one page long, or written on cards so you can use it when you actually give your talk. This brief outline may be thought of as a *keyword* outline with key words and phrases to remind you of main points, subpoints, support material you plan to use, questions you might ask, and the things you want to mention in the introduction and conclusion.

Division. The keyword outline should be divided into three main parts: introduction, body, and conclusion. As

discussed previously, the introduction may have three subparts: attention, motivation, and overview. The body will have the main points of the talk as major subdivisions. The conclusion may have three subdivisions: final summary, remotivation, and closure.

To show the relative importance of lesson materials in the body of the lesson, you might use a number or letter symbol before each entry. A roman numeral may be used to designate main points, capital letters for subpoints, arabic numerals for subsubpoints, lower case letters for subsubsubpoints, and so forth. Some rules of outlining to remember are:

1. Only one symbol should be used per point or idea.
2. Subordinate points should be indented.
3. The principle of subpoints or subordination means that a point follows logically or supports the point above it.

In Reading 2 a tentative outline for a talk on nonverbal communication was presented. Consider how that outline might be revised once you have collected all of your material. As you can see from the keyword outline, the speaker plans to seek the audience's attention by using a familiar quotation—"actions speak louder than words."—and then use an example about a "dinner jacket." The speaker plans to provide motivation by giving testimony from an expert concerning the amount of the message that is communicated nonverbally. Then the speaker plans to use a visual aid—an overview chart—that outlines the main points of the talk.

The two main points—I. Know the performance factors of nonverbal communication and II. Know the nonperformance factors of nonverbal communication—are arranged topically. The subpoints under the first main point (upper body, middle body, and lower body) are arranged spatially—from top to bottom. Each of the subsubpoints (head-eyes-facial expression; arms-hands-torso; hips-legs-feet) are also arranged spatially—from top to bottom.

The subpoints under main point II (objects, space, and time) are arranged topically. The subsubpoints under objects are arranged according to time and subsubpoints under space seem to be arranged topically.

Notice also that the speaker has written keywords not only for main points, subpoints, and subsubpoints, but also has written enough down to remember the support that will be used. Some speakers also like to write in their suggested transitions. While writing of the transitions may inhibit spontaneity, the practice is generally preferable to having weak or no transitions.

Obviously, when preparing your notes for your talk you will want to use what works best for you. This sample outline is only intended as a possible way of preparing your notes.

Exercises (053):

1. Identify the poorest method of presentation and explain why it is so.

2. Discuss the steps of presenting a talk from a manuscript.

3. Distinguish the difference between impromptu and extemporaneous speaking.

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054. Discuss the physical and mental factors that affect your presentation.

NERVOUSNESS

If you suffer from stage fright, nervousness, or fear of speaking, your audience may also become uneasy or anxious. Yet some nervousness is both natural and desirable. Even skilled speakers often experience the queasy feeling of "butterflies in the stomach" as they prepare to speak. The secret is to get the butterflies "flying in formation" through practice. Just as a visiting athletic team practices on a field before game time to accustom themselves to differences in terrain and environment, so you may need to dry run or practice your talk several times, preferably in the room where the talk will be given, before actually presenting it. Practice reminds us to look up the pronunciation of a word that is new or check an additional piece of information on an important point.

Consider the following suggestions for coping with nervousness.

1. Enthusiasm is the key when practice is over and you are ready actually to deliver the talk. At times you may talk on subjects that you find dull, but as you get more involved, the subject becomes more interesting. There is no such thing as a dull subject, only dull speakers. It is important to be enthusiastic about your subject, because enthusiasm can replace fear. And the more enthusiastic you are about the subject, the more involved the audience will be both with you and what you are saying.

2. Hold good thoughts toward your audience. The listeners in the audience are the same ones that you enjoy speaking with in a less structured environment. Most audiences are made up of warm human beings with an interest in what you have to say. They rarely boo or throw vegetables. Most listeners have great empathy for speakers and want them to do a good job.

3. Do not rush as you begin to speak. Many speakers are so anxious to get started that they begin before they are really ready. The little extra time taken to arrange your notes will generally pay big dividends. When you are ready to begin, look at the various parts of the audience, take a deep breath, and begin to speak.

PHYSICAL BEHAVIOR

Communication experts tell us that over half of our meaning may be communicated nonverbally. Although some nonverbal meaning is communicated through vocal cues, much meaning is carried by the physical behaviors

Sample Keyword Outline

NONVERBAL COMMUNICATION

INTRODUCTION

Attn: "Actions speak louder than words." "Dinner jacket" example
Mot: Dr. Ray Birdwhistle—65 percent of message communicated nonverbally
Importance—jobs, family, church, clubs
Ov: Chart listing main points and first level subpoints
Define "performance factors" and "nonperformance factors"

BODY

I. Know the performance factors of nonverbal communication
  A. Upper body—importance capitalized on by F.D.R.
    1. Head
      a. Theory of origin of head gesture
      b. Cultural differences
    2. Eyes—very important
      a. Show interest in others—example of blind student
      b. Nonverbal feedback—cultural differences
      c. Increase credibility—describe U. of Mo. studies
    3. Facial Expression
      a. Affect displays—read Charles Darwin quote on expression
      b. Affect recognition—use everyday examples
  B. Middle Body
    1. Arms—demonstrate how we use them
    2. Hands—primary means of gesturing
      a. Compare meanings from different cultures—OK and Victory signs
      b. Demonstrate use of hands
    3. Torso—demonstrate shoulder, chest, stomach—belly dancer example
  C. Lower Body
    1. Hips—Elvis example
    2. Legs—compare with foundation of building
    3. Feet—show different angles
II. Know the nonperformance factors of nonverbal communication
  A. Objects
    1. Present—clothes, home, office
    2. Past—things we have constructed—example of your former home
  B. Space
    1. Personal
      a. Stress cultural differences—give example of visit to Greece
      b. Space bubble—example of waiting for bus or in line
      c. Acceptable distance—cite statistics by Hall
    2. Constructed—office arrangement, fences, etc.
  C. Time—humorous definition from *Esquire*, Wetumpka example

CONCLUSION

Sum: Mention main points
Remot: Stress importance of nonverbal to each person
Clos: Tell humorous story of how deaf man solved problem; challenge listeners to do likewise

of eye contact, bodily movement, and gestures. You need to know how these physical behaviors can improve your speaking skill.

Eye contact. Eye contact is one of the most important factors of nonverbal communication. Nothing will enhance your delivery more than effective eye contact with your audience. Eye contact is important for three reasons. First, it is important because it lets the listeners know that you are interested in them. Most people like others to look at them when talking. Second, effective eye contact allows you to receive nonverbal feedback from your audience. With good eye contact, you can gauge the effect of your remarks. You can determine if you are being understood and which points are making an impact and which are not. You will be able to detect signs of poor understanding and signs that the listeners are losing interest. Then you can adjust your rate of delivery or emphasis. You can rephrase or summarize certain points or add more supporting data. Third, effective eye contact enhances your credibility. Speakers with greater eye contact are judged by listeners as being more competent.

To achieve genuine eye contact, you must do more than merely look in the direction of your listeners. You must have an earnest desire to communicate with them. The old advice of looking over the tops of your listeners' heads or attempting to look at all parts of the audience systematically simply does not describe effective eye

contact. Furthermore, looking at only one part of the audience or directing attention only to those listeners who seem to give you reinforcing feedback may cause you to ignore large parts of the audience. Make it evident to each person in a small group and each part of the audience in larger auditoriums that you are interested in them as individuals and eager to have them understand the ideas you are presenting. In this way you will establish mental as well as sensory contact with your listeners.

Effective eye contact can be described as *direct* and *impartial*. You look directly into the eyes of your listeners, and you look impartially at all parts of the audience, not just at a chosen few.

Body movement Body movement is one of the important factors of dynamic and meaningful physical behavior. Good body movement is important because it catches the eye of the listener. It helps hold the attention needed for good communication. But movement can also represent a marked departure or change in your delivery pattern—a convenient way of punctuating and paragraphing your message. Listeners will know that you are done with one idea or line of thought and ready to transition to the next. Finally, aside from its effects on the listeners, movement helps you as a lecturer. It helps you work off excess energy that can promote nervousness. Movement puts you at ease.

How much movement is desirable? Some speakers never move yet are quite effective. However, unless the formality of the situation or the need to use a fixed microphone keeps you in one position, then you probably should move frequently. Movement from behind the lectern can reduce the psychological distance between you and your listeners and place them more at ease. Some speakers feel that they need the lectern to hold their notes. But in most cases it is actually more effective if you carry your notes with you rather than looking down at the lectern to see them. But whenever you look at your notes, remember to *drop your eyes not your head*. In other words, have your notes high enough that you can see them.

Of course, some speakers move too much. Perhaps out of nervousness they pace back and forth in front of the audience. Still others have awkward movement that does not aid communication. Some leave their notes on the lectern then move in and out from behind it like a hula dancer. Others plant their feet firmly in one place then rock from one side to the other in regular cadence.

Effective body movement can be described as *free* and *purposeful*. You should be free to move around in front of the listeners. You should not feel restrained to stay behind the lectern, but should move with reason and purpose. Use your movement to punctuate, direct attention, and otherwise aid communication.

Gestures. Gestures may be used to clarify or emphasize ideas. By gestures we mean the purposeful use of the hands, arms, shoulders, and head to reinforce what is being said. Fidgeting with a paper clip, rearranging and shuffling papers, and scratching your ear are not gestures. They are not purposeful, and they distract from the verbal message. Placing both hands in your pockets, or behind your back, or in front of you in a fig leaf position severely limits their use for gesturing. Holding your shoulders and head in one position during the talk will also rob you of an effective means of strengthening your communication.

Although gestures can be perfected through practice, they will be most effective if you make a conscious effort to relax your muscles before you speak, perhaps by taking a few short steps or unobtrusively arranging your notes. Effective gestures are complete and vigorous. Many speakers begin to gesture, but perhaps out of fear, they do not carry through and their gestures abort. Comedians get laughs from the audience by timing gestures improperly. A gesture that comes after the word or phrase is spoken appears ludicrous. Good gestures should come exactly at the time or slightly before the point is made verbally. Poor timing results from attempting to "can" or preplan gestures. Finally, good gestures are versatile. A stereotyped gesture will not fit all subjects and situations. Furthermore, the larger the audience, the more pronounced the gestures will need to be. As with all aspects of communication, gestures must fit the situation.

You should not adopt a dynamic, forceful mode of delivery if by nature you are quiet and reserved. As with movement, gestures should spring from within. Effective gestures are both *natural* and *spontaneous*. Observe persons talking with each other in a small group. You should try to approximate the same naturalness and spontaneity of gestures when you are speaking.

USE OF VOICE

A good voice has three important characteristics. It is reasonably pleasant, it is easily understood, and it expresses differences in meaning. Technically we might label these three properties as quality, intelligibility, and variety.

Quality. Quality refers to the overall impression a voice makes on others. Certainly a pleasing quality or tone is a basic component of a good speaking voice. Some persons have a full rich quality, others, one that is shrill and nasal, and still others may have a breathy and muffled tone or quality. Although basic aspects of quality may be difficult to change, your voice may become more breathy when you are excited, tense when suspense is involved, and resonant when reading solemn language. Listeners can often tell from the voice if the speaker is happy, angry, sad, fearful, or confident. Similarly vocal quality can convey sincerity and enthusiasm. Some speakers are overly concerned about the basic quality of their voices, but at the same time they pay too little attention to the effect of attitude and emotion on the voice. Most people have reasonably pleasant voices suitable for speaking.

Intelligibility. Intelligibility or understandability of your speech depends on several factors.

1. Articulation refers to the precision and clarity with which sounds of speech are uttered. A synonym of articulation is enunciation. Good articulation is chiefly the job of the jaw, tongue, and lips. Most articulation problems result from laziness of the tongue and lips or

failing to open the mouth wide enough. You should over-articulate rather than under-articulate your speech sounds. What sounds like over-articulation to you will come out as crisp, understandable words and phrases to your listeners.

2. Pronunciation refers to the traditional or customary utterance of words. Standards of pronunciation differ, making it difficult at times to know what is acceptable. Dictionaries are useful, but as they become outdated, they should not be adhered to excessively. Generally, educated people in your community as well as national radio and television announcers provide a good standard for pronunciation. Common faults of pronunciation are to misplace the accent (saying *de*-vice instead of de-*vice*), to omit sounds (guh/mnt for government), to add sounds (ath*a*lete for athlete), and to sound silent letters (mor*t*gage or of*t*en). Do not overcompensate to the point that you call attention to your speech, but remember that pronunciation acceptable in informal conversation may be substandard when speaking in front of a group.

3. Vocalized pause is the name we give to syllables "a," "uh," "um," and "ah" often at the beginning of a sentence. While a few vocalized pauses are natural and do not distract, too many impede the communication process.

4. Overuse of stock expressions such as "OK," "like," and "you know," should be avoided. These expressions serve no positive communicative function and only convey a lack of originality by the speaker.

5. Substandard grammar has no place in speaking. It will only serve to reduce your credibility with some listeners. Research shows that even persons who have been using substandard grammar all of their lives can, with diligent practice, make significant gains in this area in a relatively short time.

Variety. Variety is the spice of speaking. Listeners tire rapidly when listening to a speaker who doesn't vary delivery style or a speaker with a monotonous voice. A speaker's voice that is intelligible and of good quality may still not appeal to listeners. You may vary your voice and at the same time improve the communication by considering the vocal fundamentals of rate, volume, force, pitch, and emphasis.

1. Most people speak at a rate of from 120 to 180 words a minute when presenting a talk. In normal speech, however, we vary the rate often so that even within the 120- to 180-word constraints there is much change. The temperamentally excitable person may speak at a rapid rate all the time, and the stolid person generally talks in a slow drawl. The enthusiastic but confident individual, however, will vary the rate of delivery to emphasize ideas and feelings. A slower rate may be appropriate for presenting main points, while a more rapid rate may lend itself to support material. The experienced speaker also knows that an occasional pause punctuates thought and emphasizes ideas. A dramatic pause at the proper time may express feelings and ideas even more effectively than words.

2. Volume is important to the speaker. Always be certain that all in the audience can hear you. Nothing hinders the effect of a talk more than to have some listeners unable to hear. On the other hand, the talk should not be too loud for a small room. A bombastic or overly loud speaker tires listeners out very quickly.

3. Force is needed at times to emphasize and dramatize ideas. A drowsy audience will come to attention quickly if the speaker uses force effectively. At times a sudden reduction in force may be as effective as a rapid increase. By learning to control the force of your voice, you can help to add emphasis and improve communication.

4. Pitch is the highness or lowness of the voice. All things being equal, a higher pitched voice carries better than a low pitched one. On the other hand, listeners will tend to tire faster when listening to the higher pitched voice. If your voice is within normal limits—neither too high nor too low—work for variety as you speak.

5. Emphasis obviously stems from all forms of vocal variety, and any change in rate, force, or pitch will influence the emphasis. The greater or more sudden the change, the greater the emphasis will be. As a speaker you will want to use emphasis wisely. Two things should be avoided: *over*emphasis and *continual* emphasis. Be judicious. Emphasizing a point beyond its real value may cause you to lose credibility with your listeners.

SINCERITY

Ironically, one of the most important points to be discussed in this chapter can be covered with just a few words. A speaker certainly needs to prepare well and possess strong delivery skills to do an effective job in front of a group. But something more is needed. To be really effective, a speaker must be sincere. So long as you obviously try to generate light and not merely heat, listeners will be amazingly tolerant of weaknesses in both preparation and delivery. But give them a chance to suspect your sincerity, and you lose effectiveness. And once lost, effectiveness is nearly impossible to regain. What is sincerity? Sincerity may be defined as a state of appearing to be without deceit, pretense, or hypocrisy—a state of honesty, truthfulness, and faithfulness.

Sincerity toward your listeners is reflected in your eye contact, enthusiasm, and concern about audience members as individuals. Sincerity toward the subject is judged by whether or not you seem involved and interested in the subject or topic of the talk. Sincerity toward self is displayed in the confidence and concern you have that you are doing the best job possible. Lack of sincerity in any of these areas will, almost certainly, directly hinder communication.

Exercises (054):

1. Give examples of how to cope with nervousness when making a speech.

2. Defend the importance of eye contact to effective speech delivery.

3. Discuss the positive effects of natural body movements and gestures.

4. Explain the three important characteristics of a good voice.

5. Predict the reaction of the audience when a speaker appears insincere.

THE MILITARY BRIEFING

THE PRIMARY purpose of the true briefing is to inform. The best military briefings are concise and factual. They may have any one of three specific purposes: (1) to secure the listener's understanding of a particular mission, operation, or concept, (2) to enable the listener to perform a specific procedure, or (3) to give the listener information on which to base decisions.

Every good briefing has three virtues: it is accurate; it is brief; it is clear. These are the ABCs of a briefing. Accuracy and clarity characterize all good speaking, but brevity distinguishes the briefing from the other types of informative speeches. By definition, a briefing is brief. The word itself denotes conciseness and directness. This does not mean that a briefing has a prescribed time limit. It does mean that it should contain no extraneous material, no matter how interesting or entertaining. In preparing to brief others, always ask yourself, "What do these people need to know?" Your answer will tell you what to include in your talk.

Often several people participate in a briefing. In briefing an operational plan, for instance, one group might cover the administrative, tactical, logistical, and operational phases, and another group might explain the mission. To enable the listeners to grasp all this information as a unit, each briefer must give only the essential information in as few words and as few minutes as completeness and clarity will permit.

In preparing to brief others, you must analyze a mass of data, choose the really significant facts, and organize them carefully. Your explanation should be simple, precise, and factual. Jokes and anecdotes rarely have a place in a briefing. The listeners are prepared for a serious talk. They want to hear the vital information on a specific subject as quickly as possible. If you are an extremely competent speaker, however, you may occasionally use humor to help you make a point or clarify a problem.

The factors controlling a military briefing are usually equivalent to those controlling a military formation. When you give a briefing, you are likely to face a captive audience. Analyze the rank and experience of the people you are to brief. Whether your audience is to be a commander and staff or some other group, try to discover how they like information to be presented. You cannot always say what your listeners want to hear, but you can try to speak in the manner they will most easily understand. In addition, you can demonstrate respect for the occasion through dignity and impeccable dress.

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055. Paraphrase the techniques for an effective military briefing.

KEEP IT SIMPLE

The special requirements of briefing impose certain limitations upon the speaker. The traditional plan of organization, with introduction, body, and conclusion, is adaptable to the clarity, accuracy, and brevity necessary in a good briefing.

Introduction. Since your listeners need and want to know about your subject, time-consuming, attention-getting devices are not needed. If, as often happens, another speaker introduces you and your subject, you need only give a quick overview of the subject and proceed immediately to the main points. If you are not introduced, you might simply say, "Good morning, I'm Sergeant Jones briefing on _____."

Body. The information for the body of your briefing requires careful consideration from the standpoint of content as well as delivery. If possible, present facts and facts only. Your facts should be provable, and you should have the proof with you in case your listeners ask for it.

Because you must be brief, you will have to omit many details from your talk. This can cause you to oversimplify a complicated subject. One way to avoid

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oversimplification is to prepare a folder of "documentation" for your listeners to refer to after you have spoken. In your opening remarks, tell them the folder is available. You gain in several ways from letting your listeners know at the outset that they will have access to complete information on your subject. Your listeners are disposed to accept the validity of your information, because they know they can check your evidence. They are less inclined to ask needless questions or to interrupt for other reasons. They will go along with very simple visual aids, because they know they can get more detailed information if they need it.

If certain facts are not available and you must make an assumption, identify the assumption, say that it is necessary, and continue. If your listeners wish to challenge the assumption, they can do so during the question period, at which time you should be able to explain the rationale of your assumption.

Do not interpret the information in your briefing. Present the facts and let your listeners draw the conclusions. Such phrases as "In my opinion," "I think," and "I take this to mean" are generally signs that the briefer is going beyond the mere presentation of information and is interpreting the meaning of the information.

Emotional appeals have no place in a briefing. Your listeners will be justified in doubting your objectivity if your presentation is charged with emotion. This does not mean that your delivery should be dry and lifeless. Quite the contrary. Because you must present pertinent information and nothing more, you should strive for an animated and interesting delivery.

Visual aids can help you be brief. They can help you show quickly and clearly many things that you would have trouble putting into words. One glance at a map would show your listeners more about air bases in Communist China than fifteen minutes of words alone.

In planning your visual aids, consider the following rules:

1. The visual aid should be used only when needed to clarify a point that is hard to explain.
2. The concept illustrated should be immediately intelligible.
3. A visual aid should be large enough for all to see at the same time.
4. The visual aid should be neat.
5. Thorough planning should precede use of all visual aids.
6. The speaker should talk to the audience at all times, never to the visual aid.

Practice the briefing with your visual aids until you can use them smoothly. They should be an integral part of your presentation. If not practiced beforehand, such simple acts as uncovering or recovering a chart can cause awkward breaks in a briefing.

Conclusion. This part of a briefing should be short but positive. Summarize your main points if you think a quick summary is necessary. Since briefings are usually followed by question periods, a good concluding sentence might be: "Ladies and gentlemen, are there any questions?" If a question period is not to follow, you might simply say, "Ladies and gentlemen, that concludes this briefing."

Transitions and Interim Summaries. The fact that a military briefing must be concise and compact doesn't mean that it shouldn't flow smoothly from one point to another. You can help the audience to understand the continuity of thought and to focus on the main ideas by using transitions and interim summaries.

Transitions. In a very broad sense, transitions involve some type of change from one thing to another and affect our lives on a daily basis. We make a transition from a state of sleep to being fully awake, from one job to another, from active duty to retirement, and finally from life to death. On a much smaller scale, our communication depends on transitions. On whatever scale we measure them, the importance of a smooth transition is no less important. Many a speaker has experienced the horrifying feeling of dying in front of an audience for lack of a smooth transition. Consider the following transition:

> We have discussed the importance of good study habits. Next we will consider some helpful research techniques.

This transition signals an impending change but does not explain the importance of or the reason for the change. Effective transitions should satisfy three basic rules: they should (1) mention the point just discussed, (2) relate that point to the objective of the briefing, and (3) introduce the next point. The following transition includes all three steps:

> We have discussed the importance of good study habits in reaching your academic goal, but the habits are useful only if the information has been provided. To get the full benefit of your academic experience, we must examine some research techniques that will be helpful in completing some of your writing assignments.

When planned and used correctly, transitions act as "mini-summaries" and contribute substantially to the continuity of the total talk.

Interim Summaries. Summaries after main points or key ideas are useful tools for maintaining continuity within a talk and for highlighting areas of particular importance. Interim summaries are not always necessary in a talk. In fact, if the point is very clear, a summary may be unnecessarily redundant and boring. You should use them, however, when main points are unusually long or contain complex or unfamiliar information. With interim summaries you repeat information concisely and reinforce audience understanding before new information is presented. Interim summaries should not take the place of transitions; they should provide a means for you to progress logically from one main point, through the transition, and into the next point.

ORGANIZE TOWARD A PURPOSE

Clear, logical organization of your material will help your listeners understand it. In organizing the introduction, body, and conclusion of the briefing, keep the purpose of your briefing in mind. Use the organizational pattern (topical, cause-and-effect, problem-solution, time, or space pattern) that will best suit your purpose and inform your listeners.

The purpose of your briefing can be to give your listeners an understanding of a certain mission, operation, or concept. Or it can be to enable them to perform a specific procedure. In either case, organize your material as you would for a speech to inform.

If the purpose is to provide your listeners with information on which to base decisions, a problem-solution plan of organization, such as those used to solve problems and to prepare operations plans and staff studies, can be effective. To adapt the introduction, the body, and the conclusion of a briefing to the staff study format, you might follow these steps:

1. State the problem. Your salutation and statement of the problem can serve as the introduction. If your listeners need background information, tell them something about the significance of the problem before stating it. You might say, "This problem was assigned to our organization by Headquarters USAF." If a security classification applies, you would add, "The security classification is _____." The amount of information needed in the introduction will always be a matter of personal judgment.
2. List and discuss the factors bearing on the problem.
3. Propose possible solutions. Include only the solutions that you have placed on your final list as most feasible, not those you have considered and discarded while developing the final list.
4. Discuss the possible solutions, testing each against the criteria you listed earlier among the factors bearing on the problem.
5. Suggest the best solution or combination of solutions. The circumstances and specific purpose of the briefing will determine the way this step is handled. The briefer's objective might be merely to give the pertinent information to a group who are to confer later for the purpose of determining the best solution. On the other hand, the speaker could be a staff member who wants to persuade a higher echelon to accept the solution the briefer believes best. In these cases, the presentation would differ in many respects, for obvious reasons.

If your briefing is to stop with the listing of possible solutions, improvise a brief conclusion that gives a sense of completion. You might simply summarize your main points.

6. State your conclusion. As in the staff study report, this step should offer a brief, clear restatement of the possible solution that you judge best. No new material or commentary should be presented here.
7. Make a short statement recommending the action that would put your solution into effect.

If the purpose of the briefing will be served by these last two steps, they can be a concise but strong conclusion for the presentation. The briefing that includes all seven steps can do more than inform. It may persuade.

LET LOGIC DO ANY PERSUADING

Although the primary purpose of the briefing is to inform, some briefings have the secondary purpose of persuading. When you use the seven steps discussed above to give information about a problem to listeners who will choose the solution, it is sometimes difficult to say whether the briefing has a single or a dual purpose. It can be argued that you are merely informing your listeners about a sound solution that you have arrived at scientifically. On the other hand, a good case can be made for the position that you are trying to persuade your listeners by "selling" your solution as the best.

Under certain circumstances, you must do a certain amount of persuading if your briefing is to bring the desired results. When a briefing calls for some persuasion, you should never resort to emotional appeals. Rely instead on facts and logic. Sound logic, when clearly and forcefully presented, can be a strong persuader—the only one you are likely to need. Under no circumstance should you inject persuasion into a briefing calling for information and nothing more.

When you prepare and deliver briefings, remember their basic function is to convey information more rapidly and effectively than would be possible by any other means. It takes practice to become an excellent briefer. Experience in other types of public speaking and in writing also help. As a member of the Air Force, you need to be adept at stating your ideas accurately, briefly, clearly.

SUMMARY

A military briefing is distinguished by its brevity. When preparing, a briefer must analyze the audience for the briefing as well as the subject to be discussed, select relevant and significant facts, and organize the material in the usual plan of introduction, body, and conclusion. If some pertinent facts must be omitted because of the time limitation, a written supplement can be prepared for listeners to refer to after the briefing. Visual aids should be used only when necessary and should be kept simple. The body of the briefing is organized according to the pattern best suited to its purpose. If the purpose of the briefing is to persuade, avoid any use of emotional appeals. The best persuader is a logical, clear, and accurate presentation of the facts.

Exercises (055):

1. **Explain the three basic purposes for an effective military briefing.**
2. **Discuss the most effective method to persuade, using a briefing.**
3. **Defend the use of transitions in your briefing.**
4. **Summarize the recommended steps for an effective military briefing.**

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